

The Cotton Gin and Oil Mill
PRESS

A PROGRESSIVE AND RESPONSIBLE PUBLICATION

JULY 28, 1956

57th
year

THE MAGAZINE OF THE COTTON GINNING
AND OILSEED PROCESSING INDUSTRIES



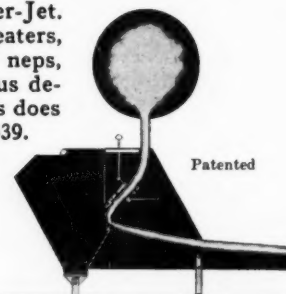


You can see it here!

This unretouched photograph is of trash discharge scooped from a Super-Jet lint cleaner in actual operation on moderately trashy machine picked cotton. You can see plenty of trash... leaves, stems, neps... and a lot of nep-stock. But there's no spinable fiber. Super-Jet gives you a better net turnout of good spinning-quality fiber because it takes out trash; leaves lint in.

AND NO MOVING PARTS IS THE REASON

Here is a cross section of a Super-Jet. It has no moving parts — no beaters, no saws — nothing to create neps, nothing to wear out. A Lummus development of gentle air-streams does the work. Write for Bulletin 639.



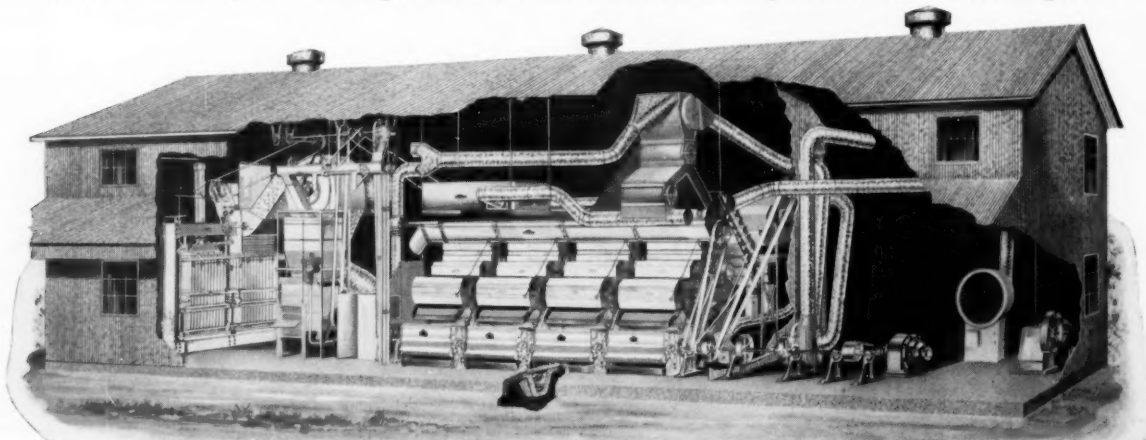
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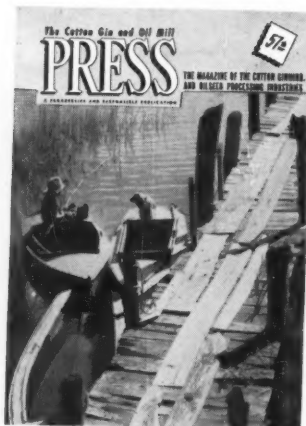


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★ ON OUR COVER:

From the apparent wear those boards have received, it must be a good place to fish. At least that is what this little fellow and his dog think. It's hard to tell who's more interested in what, man's friend in man, or junior in the fish. There is one thing for certain, our cover picture will bring back pleasant memories to many of our readers.

Photo by A. Devaney

VOL. 57 JULY 28, 1956 No. 15

The Cotton Gin and Oil Mill PRESS...

READ BY COTTON
GINNERS, COTTONSEED
CRUSHERS AND OTHER
OILSEED PROCESSORS
FROM CALIFORNIA TO
THE CAROLINAS

★ ★ ★

OFFICIAL
MAGAZINE OF:

National Cottonseed
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Association

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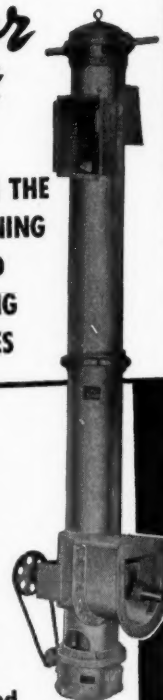
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. . . for ready-mix (fully automatic) treaters. Ready to use. Controls seed- and soil-borne disease on wheat, oats, barley, rye and flax. Also furnishes volatile mercury to assure penetration that completes the job . . . disease control that reaches cracks and hidden crevices.

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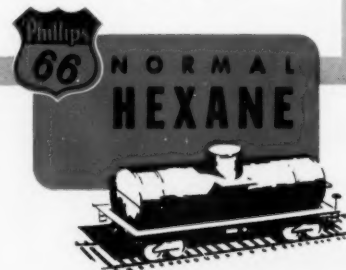
You can count on outstanding performance every time with Phillips 66 Solvents. Free from harmful contaminants to start with, special handling and storage facilities keep them clean and pure. The narrow boiling range

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Operators' Schools Part of Permanent Program

Training in the proper use of the latest equipment in gins fits into the over-all goal of working to help farmers produce high-quality cotton while they are converting their operations to mechanization.

TENNESSEE GINNERS are working for farmers who must produce high quality cotton to stay in the business and at the same time mechanize as best they can. This has been realized in Tennessee for so many years that it is a part of Tennessee ginners' program to cooperate with the Extension engineers and gin machinery manufacturers in Cotton Gin Operators' Schools and any other programs that improve their farmers' chances of selling the highest quality cotton the market can buy. In recent years one of the contributions to high quality cotton has been the gin operators' schools.

The most intensive training program for gin operators began in 1953 when Tennessee, Missouri, and Arkansas ginners, with Extension engineers, planned a program with the cotton gin manufacturers in Memphis. The schools were held in April with the best cotton gin engineers the Continental, Murray, Lummus, Mitchell, Hardwicy-Etter Co. had available, giving the gin operators instructions for two days in their plants in Memphis. These men used gin machine parts and large cut-away drawings to show how the machines were made, how they worked, and how they were adjusted to get the best work the machines were capable of turning out.

During the study period of the gin stand, for example, the stand was placed

(EDITOR'S NOTE: This article was written to tell how, in one state, gin operators' schools are helping to improve ginning and cotton quality. Similar schools have been held in other states; and, as mentioned by the authors, Arkansas and Missouri, and later Mississippi and Louisiana, joined in the schools in Tennessee. Close cooperation by gin machinery manufacturers, ginners' associations, USDA and state Extension Services and others account for the success of these programs in all states.)

before the group with a variety of the assemblies, such as saws and ribs, that affected performance. These were taken from the part's bins and in most cases a worn part was used to show the effect of the worn saw or rib on performance. The open machine would also show the effect of adjustment on performance.

We had talked in the field about "uniform-loose roll" giving a better grade of cotton and saving power; but here was an opportunity to show a gin operator how and why he should run his machinery with a loose roll and we took advantage of this opportunity. With the gin stand and all the other gin machines before him, we could prove to him beyond a doubt that "tight roll" operation cost him in more

power, higher wear, as well as costing the farmer in poor grade of cotton.

In the study of feeders, it proved as easy to show the operators why the overflow should be kept to a minimum and that all by-passes should be used to keep from re-drying and over-machining part of the bale of cotton.

While studying cleaners, the function of each could easily be shown with the machines and parts of the machine there before the audience. The reason for using a minimum amount of machinery on hand picked cotton and more machines on rough or machine picked cotton was very easily pointed out. While studying drying, how to get adequate drying to "insure smooth ginning" was the main objective.

We divided the operators present into groups. While one group studied the gin stand, another group was in another part of the plant with another instructor studying the feeder, cleaners, press, drying equipment, and a variety

(Continued on Page 43)

By M. T. GOWDER and J. A. MULLINS
Tennessee Extension Service

REPRESENTATIVE SCENES at gin operators' schools are shown here. Top right, gin stand maintenance is being discussed, as the instructor explains the importance of sharpening saws properly. Bottom left, this group of gin operators is interested in an explanation of cleaning equipment. Bottom right, the effect of drying is studied through the use of cut-away machines.

CG&OMPRESS Photos





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Magni-Power has a Proven Record of Fire Prevention

Fire is always a costly factor in downtime and equipment damage — and can even result in total destruction and financial ruin.

Of all fire hazards in ginning, the percentage caused by tramp metal was never fully realized until the results of magnetic extraction showed tremendous reductions in fire losses.

Several State Rating Bureaus are already issuing Fire Insurance rate credits for magnetic fire protection. Rate credit action is now pending in other cotton states in view of the standards recently set up by their rate governing bodies appointed committees.

One important requirement of those standards is that the permanent magnet installed must bear this label "Listed Under Re-examination Service of Underwriter's Laboratories, Inc."

MAGNI-POWER ALREADY CARRIES THIS LISTING so that when your state code provides Fire Insurance Rate Credits your installations will qualify. Don't wait — write now for details.



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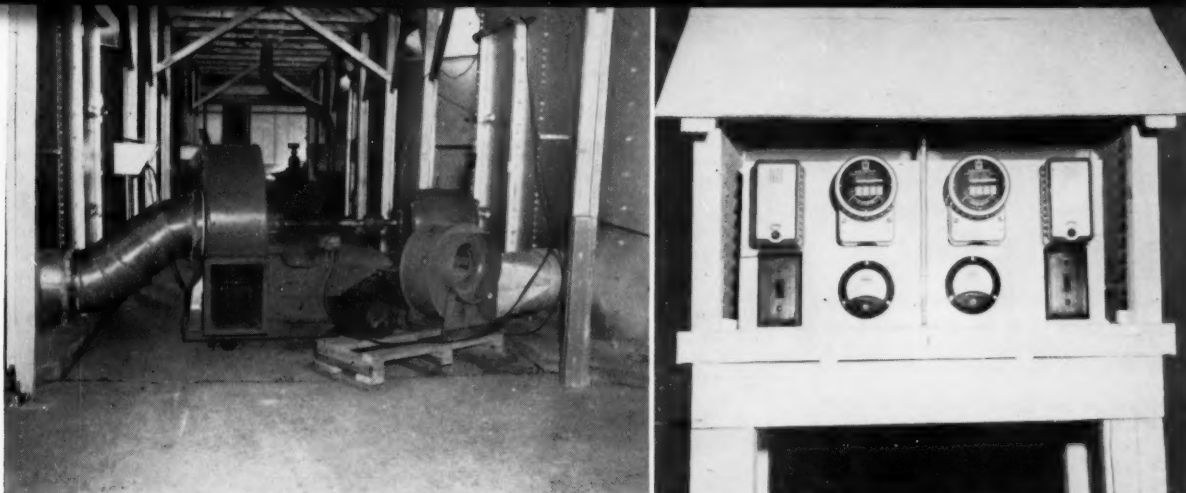
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IN THE PICTURE on the left, the fan on the left was periodically used to pull air through seed in one test bin. The permanently installed fan on the right was used to push air upward through seed in another bin. The same size and make of fan was used to pull air downward through seed in the third test bin. The picture on the right shows instruments which were used to control automatically the operation of one horsepower electric motors and 12.25 inch diameter centrifugal fans.

Using Aeration To Maintain Quality Of Cottonseed in Storage

Texas Experiment Station and Texas Planting Seed Association are cooperating in conducting a program of planting seed storage research, of interest to ginner and crushers, that is reported here.

TEXAS Planting Seed Association in Bryan is cooperating with the Texas Agricultural Experiment station to determine the effectiveness of different methods of aeration in maintaining germination and in preventing increase in free fatty acid content of cotton planting seed.

In 1955, three steel bins or tanks, each 26 feet in diameter and 24 feet high, were used for experimental purposes. The bins were filled with cottonseed ranging in moisture from 6.8 to 7.5 percent. Seed in one of the bins were cooled by periodically pulling air with a portable 34-inch wheel diameter centrifugal fan, operated by a 15-horsepower electric motor. The same fan was used alternately on four or five bins. This fan supplied air at a rate of 19.5 cubic feet per minute per ton against a static pressure of 7.75 inches water gauge.

• **Portable Fans Also Used** — The 34-inch portable fan also was used to cool seed in the other two test bins during the four to six day period required for filling. After the bins were filled, each bin was equipped with a 12.25-inch wheel diameter centrifugal fan, operated by a one-horsepower electric motor. These fans were used for the remainder of the storage period. Air was pushed upward through the seed in one of the bins and pulled downward through the seed in the other. Each fan moved 850 cubic feet per minute through 158 tons of cottonseed against a static pressure of 3.50 inches water gauge. This amount

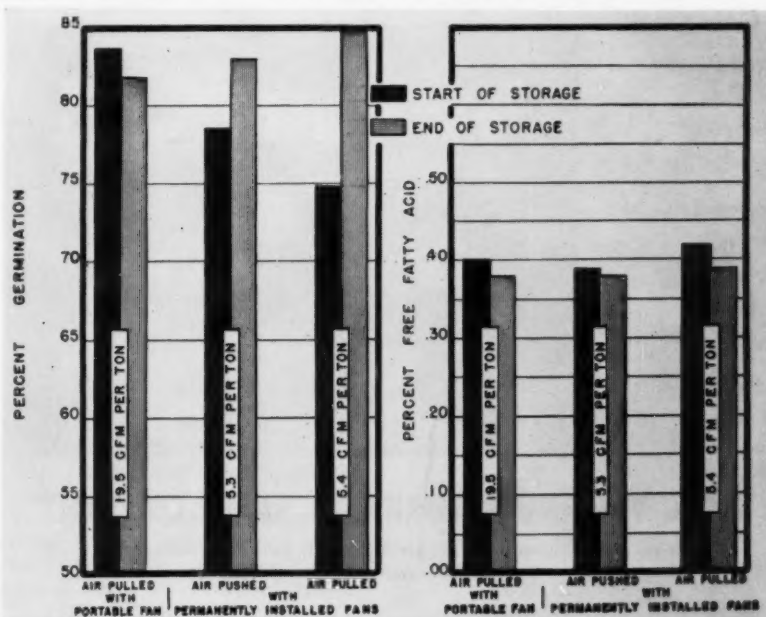
of air was equivalent to 5.4 cubic feet per minute per ton. Automatic controls were set to operate the fans any time the atmospheric relative humidity was below 80 percent and the outside air temperature 10°F or more below the average temperature in the seed.

During the period Sept. 1 to Nov. 5, cottonseed was cooled to an average

temperature of 65°F with the portable fan unit. The fan operated a total of 396 hours during this period. During the same length of time, seed temperatures were reduced to 59°F in the bin equipped with the small fan set to pull air and to 62°F in the bin where air was pushed through the seed. The fan

(Continued on Page 37)

THESE CHARTS show percent germination (left) and free fatty acid content (right) of cottonseed cooled by different methods of aeration.



By J. W. SORENSON, JR.

Texas A. & M. College

At University of Illinois

Leaders of Soybean Industry to Meet

■ **EXPORTS**, prices and work of new council will be discussed at convention of two associations.

Reports on the export outlook, a price forecast and discussions of the new Soybean Council of America will be among the highlights of the 1956 annual convention of American Soybean Association, Aug. 13-16, at the University of Illinois, Urbana. The convention is being held in conjunction with the annual

meeting of the National Soybean Processors' Association.

Speakers for the meeting will include: W. L. Burlison, retired head, department of agronomy, University of Illinois: "Soybeans in Illinois."

J. L. Cartter, director, U. S. Regional Soybean Laboratory, Urbana, Ill.: "The Twentieth Anniversary of the U. S. Regional Soybean Laboratory."

John M. Dunleavy, plant pathologist, Iowa State College, Ames, Iowa: "Recent Developments in Soybean Disease Work."

T. A. Hieronymus, associate professor agricultural economics, University of Illinois: "Price Outlook for 1956 Soybean Crop."

R. W. Howell, plant physiologist, U. S. Regional Soybean Laboratory, Urbana, Ill.: "Factors Affecting Growth

and Maturation of Soybeans."

J. W. J. Stedman, marketing specialist, fats and oils division, Foreign Agricultural Service, USDA, Washington; and Elmo Shaw, board of grain supervisors, Agricultural Marketing Service, USDA, Chicago: "Report of European Soybean Marketing Study by International Inspection Team."

Howard Kurtz, board of grain supervisors, Agricultural Marketing Service, USDA, Chicago: "The Federal Soybean Grading Standards."

J. W. Calland, managing director, National Soybean Crop Improvement Council, Decatur, Ind.: "Irrigation of Soybeans in Various Soybean Growing States."

D. C. Heitshu, chief engineer, John Deere Harvester Works, Moline, Ill.: "The Harvesting of Soybeans."

● **Exports To Be Stressed** — The export situation will receive much emphasis, as those attending hear reports from soybean industry leaders who have been abroad recently to study the outlook.

George M. Strayer, executive vice-president of the Association, has just returned from Europe where he explored export possibilities under the joint auspices of the Association and the Soybean Council, and will report to the convention.

Ersel Walley, Fort Wayne, Ind., and Marion Hartz, Stuttgart, Ark., are two other soybean industry leaders on the program. They have recently been in Japan in connection with soybean sales abroad.

The National Soybean Processors' Association will hold its business meeting on Aug. 13, while the American Soybean Association convention is scheduled on Aug. 14-15. All sessions will be in Illini Building, and there will be numerous exhibits.

On Aug. 16 there will be a tour of the U. S. Regional Soybean Laboratory, University of Illinois South Farm, and USDA's Northern Regional Research Branch.

Officers of the American Soybean Association are Albert Dimond, president; George M. Strayer, executive vice-president, and H. H. Huddleston, vice-president. Processors' Association officers are R. G. Houghtlin, president; Dwight L. Dannen, vice-president; Eldred A. Cayce, secretary; and Harold L. Abbott, treasurer.

● **Winners To Start Tour on Aug. 5**

WINNERS in the 1955 cotton production contest sponsored by Oklahoma Cotton Research Foundation will leave Oklahoma City on Aug. 5 for their trip to irrigated areas of the Southwest. The group will return Aug. 14 to Oklahoma City.

Future Farmer and 4-H Club winners in the contest and their advisors will make the trip as guests of crushers, ginners and others in the cotton industry. They will make stops in irrigated cotton areas of West Texas and New Mexico and visit Mexico.

■ **TILFORD CHENEY** was recently re-elected president of the board of the Kaweah Delta Cooperative Gin, Inc., Tulare, Calif. **RAY OESTING** and **A. M. OGDEN** were also re-elected to the board. **HARRY DOOLEY** was named vice-president, and **R. A. WILLIS** is the other director.

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durable . . .
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ginners
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Tests prove: Eriez non-electric, permanent-powered gin magnets provide 53% to 70% more magnetic power than any other listed type!

GET THE BEST PROTECTION POSSIBLE... IT COSTS NO MORE!

Don't settle for anything less than the finest magnetic protection you can have... Eriez HI-POWR Gin Magnets. Tests prove that Eriez Magnets are 53 to 70% stronger in the flow area than any other U.L. listed gin magnet! This means you get greater protection against tramp iron damage with an Eriez HI-POWR magnet than any other magnet... protection against nails, bolts, screws, baling wire, etc. Remember, it only takes 1 piece of tramp iron to cause a serious fire... or damage gin machinery and cause downtime and loss of production. Powerful enough to snatch tramp iron from rapidly flowing lines and hold it securely, Eriez Gin Magnets have saved thousands of dollars for other ginners and can do the same for you!

RESEARCH PROVES TRAMP IRON IS MAJOR CAUSE OF GIN FIRES!

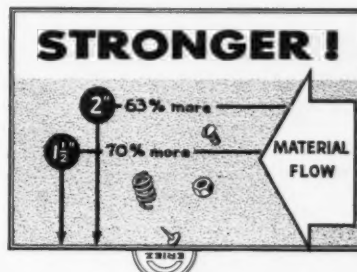
In an exclusive experimental program conducted and paid for by Eriez over a two year period, it was proved beyond all doubt that tramp iron is a major cause of all gin fires. It was also proved that tramp iron could be effectively controlled by the proper installation of an Eriez HI-POWR Gin Magnet! Especially developed for the ginning industry after extensive experimental testing, Eriez Gin Magnets were soon proving their value throughout the Cotton Belt. Fires and explosions were reduced drastically wherever they were installed; machinery damage and downtime virtually disappeared. Enthusiastic ginners wrote telling how production and profits increased after installation. Specify Eriez — the original manufacturer who introduced... and alone proved the effectiveness of permanent magnets.

NO COMPROMISE WITH QUALITY!

Because Eriez pioneered the development of permanent magnetic equipment for industry (and is today the world's largest producer of this type of equipment), its own standards were so high that the Gin Magnets produced by the company were 53 to 70% stronger than minimum U.L. requirements. Eriez could reduce the quality and strength of its gin magnets and still meet U.L. standards, but it refuses to go back on its reputation of providing "the finest magnetic equipment available to industry."

Choose the best for the best protection... Eriez... available through your gin machinery manufacturer or from an Eriez sales engineer serving your territory.

FREE! Gin Magnet Bulletin describing various types of Eriez HI-POWR Magnets for the ginning industry, and proper installation. Send for your copy today.



This illustration shows the powerful magnetic field (a barrier against tramp iron) of an Eriez Gin Magnet. In a flow 2" from the magnet's face, the pulling power of an Eriez HI-POWR Magnet is 63% stronger than any other U.L. listed gin magnet; at a depth of 1 1/2" this magnetic strength advantage is 70%! With an Eriez Gin Magnet you trap MORE metal... get safer, SURE protection at no additional cost.

Protect yourself with an approved installation... and save money, too!

In addition to giving you the best tramp iron protection possible, Eriez HI-POWR Gin Magnets can save you money on insurance premiums. Tennessee and Arkansas already offer savings to ginners who use properly installed magnetic separators; throughout the rest of the Cotton Belt State Rating Bureaus are considering reduced rates where correct installations of magnetic equipment are made. These steps are a result of Eriez' foresight and leadership in making original field test trials and spearheading the drawing up of approved standards of strength construction which established the pattern of submitting magnets for U.L. listing.


Eriez magnets give you this much MORE pulling power than other U.L. listed magnets:

Distance from magnet's face	CLASS I	CLASS II
2"	*63%	*58%
1 1/2"	*70%	*53%
1"	41%	38%
3/4"	36%	30%
1/2"	23%	18%

*53 to 70% MORE STRENGTH in the flow area in which you operate!

Look At These Advantages of Eriez HI-POWR Gin Magnets

All Eriez Gin Magnets are non-electric, self-contained. They have no wires or attachments. They require no electricity, cost nothing to operate and no maintenance is needed except occasional cleaning (self-cleaning models available). Powerful Alnico V magnetic elements are guaranteed forever; the first cost is the only cost.



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Research With Cottonseed Meal, Past, Present and Future

The author presented the following review before the annual convention of Texas Cottonseed Crushers Association in Dallas, providing information of wide value to the industry.

IN THIS DAY and age it is difficult to realize that there was a time when cottonseed accumulating around the gins constituted a waste disposal problem. In several states, laws were passed requiring gins to remove the seed so that they would not decompose and thus become a public menace. Gins were also prohibited from dumping seed in streams. Since that time we have come a long way in the utilization of cottonseed and its products.

Some years later, the cottonseed crushing industry was established and cottonseed has never been allowed to go to waste in this country since that time. In the early days, the meal or cake was disposed of in three major channels. For a while a large portion was used for fertilizer, another portion was used for domestic cattle feeding and the balance was exported to be used primarily in cattle feeds abroad. As the value of the cake for cattle feeding became more widely recognized, the use of meal in fertilizers progressively decreased.

Throughout the years, research has contributed a great deal toward the effective utilization of cottonseed meal. It is the purpose of this paper to review very briefly a few of the more important developments and to take a look at some of the possibilities for the future.

• **Vitamin A Research** — One of the first major contributions of nutritional research to the industry came about after a widespread opinion had developed that cottonseed meal caused blindness, stiffness of gait, swelling of the joints and loss of appetite in cattle. Well-planned feeding trials by a number of investigators showed that cottonseed meal was not the cause of the trouble, but rather that these symptoms are the result of Vitamin A deficiency. In making the shift from hay or hay plus grain to hulls and cottonseed meal, Vitamin A had been left out. All that was needed was to add small amounts of green hay or any other source of carotene or Vitamin A to the ration.

The utilization of cottonseed meal for farm animals other than the ruminants has been a much more difficult problem. Early animal husbandry textbooks contained the statement that cottonseed meal was poisonous for hogs and should never be used in swine feeds. The first break in this situation came with a report by Fred Hale in 1930 showing that commercial hydraulic cottonseed meal could be safely and profitably fed

to hogs when the amount was restricted to nine percent of the diet. The report was quickly confirmed by other investigators and the way was open for a limited expansion of cottonseed meal markets. The necessary precaution of restricting the amount fed to nine percent of the total diet was not always observed and occasionally losses of hogs occurred as a consequence.

Years before, Osborne and Mendel in their famous studies on vegetable proteins had shown that the ill effects resulting from feeding raw cottonseed meats to swine or to rabbits could be reduced or eliminated entirely by cooking the material with water or by steaming. Since that time quite a number of investigators have studied and proposed various procedures for treating cottonseed meal to make it safe for swine and for poultry when fed in any

moisture content, and time of cooking, cottonseed meal could be consistently produced which was safe for guinea pigs. These small experimental animals are particularly sensitive to the effects of gossypol.

The next step was to transfer these findings to the operation of a commercial hydraulic mill. This was done through the cooperation of the Brenham Cotton Oil and Manufacturing Co. The meal produced was fed to hogs at a level of 25 percent of the diet without an ill effect of any kind.

It was found that, in order to make meal safe for hogs, the content of free or native gossypol must be reduced to a rather low level. This called for a reliable, reasonably rapid analytical method for testing the meals. The challenge was met by the development of the first colorimetric method for free gossypol at the Texas Agricultural Experiment Station, more than 10 years ago. Previous analytical methods for gossypol depended on the quantitative isolation of a gossypol derivative and required a week or longer for the completion of a test.

With the establishment of processing conditions whereby meal with low free gossypol could be consistently produced in a commercial mill and with suitable analytical methods available for processing control, the prospects looked bright. Unfortunately, protein quality

By **CARL M. LYMAN**

Texas Experiment Station

amount which the animals will eat. Among these may be mentioned the use of iron salts.

• **Research on Gossypol** — In the meantime, considerable information had accumulated concerning the chemical nature and physiological action of a bright, yellow-colored constituent of cottonseed called gossypol. It is this compound which is responsible for the difficulties which result when some cottonseed meals are fed to swine, rabbits or guinea pigs. Rats and chicks are affected, but to a lesser extent. Some investigators believe that there are other major factors, but the evidence is by no means convincing.

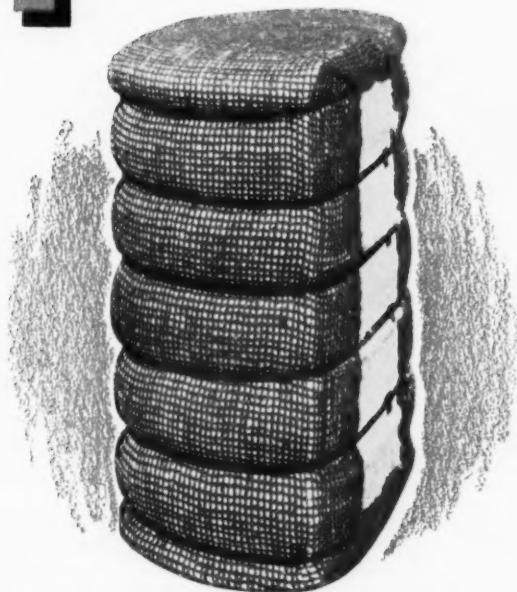
By moist heat treatment during the "cooking" of cottonseed meats in a mill, this compound is largely converted into a form which no longer is capable of causing unfavorable physiological action in hogs and other nonruminating animals. In this inactivated form, gossypol is bound to other constituents of the meal and cannot be freed to any great extent by digestive enzymes. Thus, it is frequently called "bound gossypol."

Using an experimental laboratory cottonseed cooker, Lyman and co-workers studied the effect of processing variables on the residual toxicity of cottonseed meal. It was found that by the control of the variables, temperature,

Two Articles Discuss Meal Research

The accompanying discussion of cottonseed meal research by Dr. Carl M. Lyman is the second of two articles by outstanding research authorities working with cottonseed meal that have been published in The Cotton Gin and Oil Mill Press. The initial article, by Dr. A. M. Alt-schul of USDA's Southern Regional Research Laboratory in New Orleans, appeared in the July 14 issue of The Press. The material in it was first presented in an address at the 1956 annual convention of Mississippi Cottonseed Crushers' Association, while Doctor Lyman presented his address before Texas crushers.

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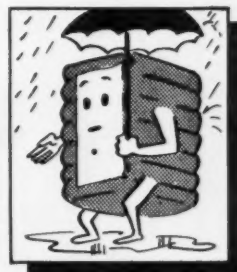
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in meal prepared in this way was not generally satisfactory.

• **Two Factors Involved** — About this time, it became apparent that the utilization of cottonseed meal by animals other than ruminants involves two major factors. The first is the necessity of reducing the free gossypol content to fairly low levels in order to avoid the unfavorable physiological effects of this compound. The second and equally important factor concerns the quality of the protein as modified by processing and other variables. The results of current investigations, which sometime appear to be rather confusing, can be more readily interpreted if these two aspects of the problem are kept clearly in mind.

During recent years a number of collaborative studies have been conducted on cottonseed meals of known processing history. State agricultural experiment stations, USDA and industrial research groups have participated. Several types of feeding trials were used for the nutritional evaluation of the meals and the samples were examined chemically for distinguishing characteristics. At appropriate intervals, informal conferences have been held under the sponsorship of the National Cottonseed Products Association and the Southern Regional Research Laboratory of the USDA.

The results of the first series of tests made it very evident that the nutritional value of different samples of cottonseed meal made by any method (hydraulic, screw press, prepress solvent, or solvent) varies over a wide range. Processing conditions were recognized as important factors. It was also recognized

Ginners Will Meet in South Carolina

Carolinas Ginners' Association will hold its 1957 annual convention at Clemson College in South Carolina, Clyde R. Allen, Bennettsville executive secretary, has announced. The dates will be Jan. 31-Feb. 1. This represents a change from the past two years, when the Carolinas ginners met in Atlanta concurrently with the Southeastern Gin Suppliers' Exhibit and annual meetings of the Georgia and Alabama - Florida groups.

As previously announced in The Press, the Southeastern Gin Suppliers' Exhibit will be held again in Atlanta, under sponsorship of the Southeastern Ginners' Council, composed of ginners in Georgia, Alabama and Florida, and ginners from other states will be invited. Information regarding plans and exhibit space for the event, to be held Feb. 12-13 at the Biltmore Hotel, is available from Tom Murray, 714 Henry Grady Building, Atlanta 3.

that the development of a chemical test which would reflect the quality of the protein was of paramount importance in the program for the improvement of the product. After trying and discarding a good many chemical tests, the research group at Texas A. & M. found

that the solubility of the protein in 0.02 normal sodium hydroxide was a good index of protein quality. Other groups have now verified the usefulness of this procedure as a mill control test in the production of superior quality meals.

Analysis of the results of later collaborative tests showed an inverse correlation between bound gossypol and protein quality. Evidence continues to accumulate in favor of the postulate that when gossypol is inactivated during processing it combines with some of the protein to form an insoluble, indigestible substance. The net result is a reduction in protein quality.

A successful method for the production of superior quality cottonseed meal must provide for the removal, destruction or inactivation of gossypol under conditions which minimize the reaction between gossypol and cottonseed protein. A successful method must also avoid excessive heat treatment which might damage the protein in other ways.

• **Where Are We Today?** — As a result of research, new domestic markets for cottonseed meal have been established. These new markets are not for just any cottonseed meal. They are for cottonseed meal of superior nutritional value for swine and poultry. Such meals are manufactured to meet certain definite chemical characteristics. They must have a low free gossypol content (not over 0.04 percent). They must have high protein quality as indicated by high nitrogen solubility preferably 75 percent or above.

Two general types of commercial pro-

(Continued on Page 40)



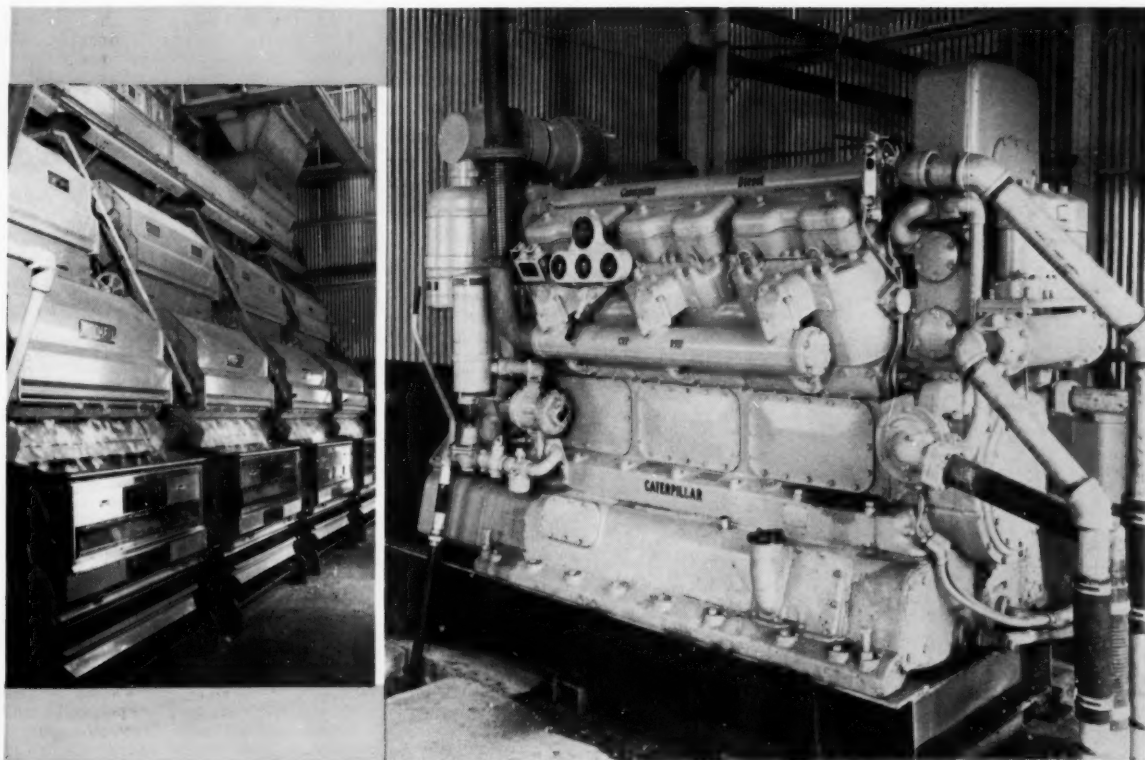
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What they like about it today is the convenient starting, low cost of operation, long life and good dealer service. The big Cat Engine powers four 90-saw Murray gins, nine fans, No. 70 dryer, cleaners, separators, burr machine, condenser and hydraulic tramper. That's a 400 HP load and the engine handles it without strain, 12 hours a day, six days a week.

Mr. Voltin goes on: "We looked at several other engines before we purchased this one. If we'd looked only at first cost we could have bought the same horsepower for less. But we wanted an engine to do a long-life job, and we figured it would be the cheapest in the long run."

Caterpillar Cotton Gin Engines are built to save their owners money over a span of years. Their four-cycle design means more fuel energy is turned into work power. There are no cylinder ports or air boxes

to clean out. Oil, fuel and air are all thoroughly filtered to keep out lint and dust.

The D397 is now available with spark ignition, to burn natural gas where that is the most economical fuel. A 10:1 compression ratio adds to fuel savings, and the low-tension ignition system makes for complete dependability.

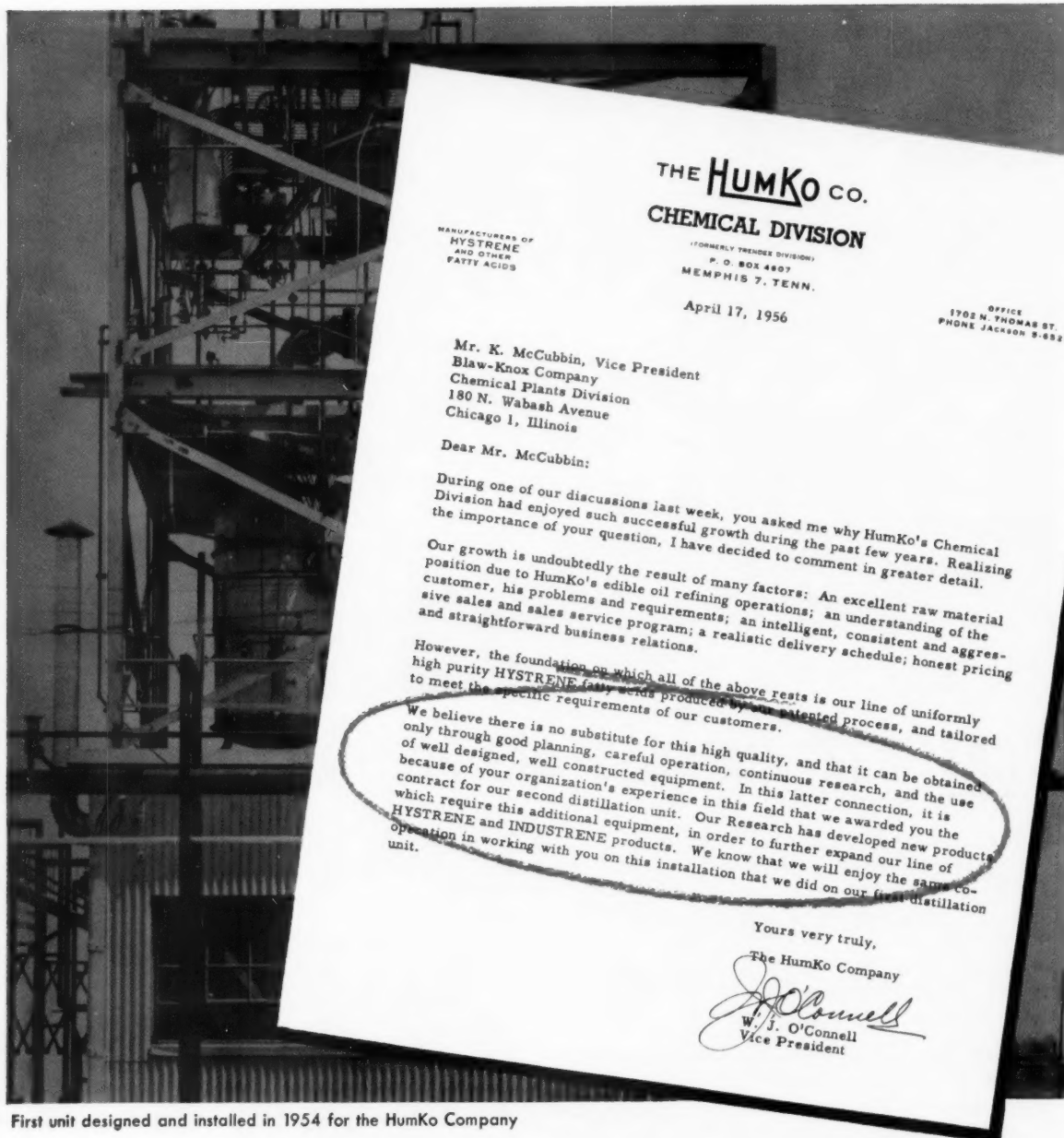
Your Caterpillar Dealer has a full line of engines ranging up to 650 HP (maximum output capacity). His reliable service and stock of genuine Caterpillar parts are factors in the long, money-saving work life of the engines he sells.

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acids industry. A stainless steel vessel with this superior furnace will provide the additional advantages of better heat transfer and elimination of corrosion problems.

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• Memphians Saved As Yacht Burns

THIRTEEN PERSONS, including Mr. and Mrs. Herbert Humphreys of Memphis, were rescued from the fog-shrouded waters of Lake Michigan July 22, after fire swept through the yacht HumKo.

The 87-foot vessel, owned by the HumKo Co., Memphis vegetable oil products company, sank within seven minutes after fire broke out in the engine room.

Humphreys, chairman of the board of the Memphis firm, and his wife, along with four other guests and a crew of seven, were rescued by the crew of the Wabash, a railroad car ferry bound for Frankfort, Mich.

Other guests aboard with the Humphreys were Mr. and Mrs. G. C. Pound of Chicago and Mr. and Mrs. R. H. McWilliams of St. Louis. Pound is president of Kraft Foods, Inc.

Details of the grim voyage which began as a pleasure cruise were told by Humphreys who explained that the Wabash was running about an hour behind schedule because of the fog and mist which covered Lake Michigan. "If she had been on schedule, she would not have been in the same vicinity of our craft," he said. "Too much of the ordinary traffic which would have been on the lake was idle because of the steel strike."

The Humphreys flew to Chicago to visit the Pounds. The entire party went to Milwaukee where they boarded the HumKo early in the morning. They were cruising about seven miles off Two Rivers, Wis., about 11:30 a.m., when Capt. M. M. Gothberj shouted word of the fire in the engine room.

Humphreys said he grabbed his wife, Wilda, and they ran for a dinghy. The crew and other members of the party loaded themselves in the dinghy and the one liferaft.

The dense smoke created by the fire attracted the attention of Capt. D. A. Erickson of the Wabash. It was the only other vessel in the area.

Humphreys said the fire enveloped the HumKo so quickly, no one had time to use the ship to shore telephone to summon help.

The Humphreys lost all their personal belongings, but said they were lucky to be alive.

Animal Fats Supply New Stimulator of Growth

Armour & Co. research workers have developed chemicals, from animal raw material, that show promise as feed additives to increase growth. Called "chemo-biotics", the series of chemicals include "Dynafac" which the firm derives from animal fats, and reports will increase the growth rate of pigs by 10 to 15 percent.

Dynafac is described as a pink, free-flowing granular substance. The active ingredient is trimethylalkylammonium stearate. This feed additive is being handled exclusively by McKesson-Robbins, Inc., drug and chemical distributing firm, according to Armour & Co.

■ FRED CARTER, Lake City, Ark., planter and ginner, is the new president of St. Francis Levee Board, which includes seven Northeast Arkansas counties.

Cotton Ginnings Up in Rio Grande Valley

Ginnings of 1956 cotton crop in the Lower Rio Grande Valley of Texas during the week ended July 20, almost doubled those of the preceding week.

The fourth weekly ginning report issued by Nick Doffing, State Department of Agriculture administrator in the Valley, showed 85,515 bales of cotton were ginned in the four Valley counties compared to 45,931 bales the preceding week.

Despite a later season, a total of 149,931 bales of cotton has been ginned to date in the four-week harvesting period compared to 138,915 bales harvested at the same time last year.

As of July 20, Hidalgo County continued to lead in ginning totals with 36,749 bales brought in for a season total of 73,712 bales.

Total ginnings in Hidalgo and Starr Counties were still slightly behind last year's figures, while Cameron and Willacy totals were slightly ahead of last year's.

Ginners' School Postponed

The proposed cotton ginners' school at Altus, Okla., Aug. 8-10, has been postponed.

According to Edgar L. McVicker, secretary of Oklahoma Cotton Ginners' Association, the project has not been abandoned. It is planned for 1957.

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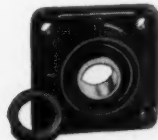
Today you can reduce the maintenance costs of your machines more effectively through the application of Fafnir Power Transmission Units equipped with either slinger type or contact type seals. Both types are pre-lubricated at the factory with long-life, completely filtered grease. Relubrication, therefore, is no longer a requisite, and cleaner bearing operation is assured.

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His Dad Was a Gin-Maker, So He Fought

A Duel That Ended Duelling

GIN-MAKER once was a fighting word, and figured in a duel that helped to end duelling in the Old South.

It all happened in historic Camden, S. C., perhaps the center for the duelling that was so prevalent between the Revolutionary War and 1882, when the practice was brought to an end. The end came largely as a result of the fight in which calling a man a "gin-maker" was involved.

Camden is proud of the historic events that have happened around there, including many battles of the Revolutionary and Civil Wars. It is proud, also, of the famous characters who have visited Camden, such as Lord Cornwallis, Lord Rawdon, General Greene, General Gates, General Sumter, General Marion, Baron DeKalb, Marquis DeLafayette, George Washington and other national and international figures. Baron DeKalb is buried in Camden and LaFayette presided over the laying of the corner stone of his monument.

• **Epidemic of Duels** — There was an epidemic of duels between 1878 and 1882, and "Historic Camden", a publication, mentions that it was thought that the disappointments and severe changes in living following the Civil War had something to do with the flare-ups of temper that led to the official challenges to meet on the Field of Honor.

There were many repercussions following the duels. For example, after the death of Colonel Nixon, a brilliant young man with a fine future, there was a large fire in Camden that threatened the whole town. Colonel Nixon's father was so embittered over the loss of his son, and what he felt was lack of sympathy of all of the people, that he defied the firemen to save his fine residence. Major Hopkins, the man who killed Colonel Nixon, died a year later, and

Cotton ginning figured in the final meeting on a Field of Honor in South Carolina, near Camden, which has been a center for many historic events since the Revolution.

his death was attributed to grief over the matter.

• **The "Iron Man"** — One of the most famous duels was fought in 1845 between Colonel James P. Dickinson and Major John Smart, and had an interesting feature that has been the subject of many articles.

This was the full-size silhouette of Major Smart which Colonel Dickinson made from heavy boiler plate. It was later called the "Iron Man."

Colonel Dickinson used the Iron Man to practice for the duel, and shot at it hundreds of times to perfect his marksmanship. Following the duel the Iron Man was dumped into the DeKalb pond near Camden and was forgotten for many years. In 1875 the lake was drained and there was the Iron Man, standing erect in the mud of the pond. It was retrieved and taken to the lake of the beautiful home known as "Holly Hedge", and from 1878 to 1880 was used by the participants of duels of that time to practice on before fighting their duels. That estate, Holly Hedge, is now owned by Mrs. Marion DuPont Scott, of the DuPont family, and former wife of Randolph Scott, the movie actor. The Iron Man is now owned by L. W. Boykin, a large planter, who lives at Millway Plantation, 10 miles below Camden.

• **The "Gin-Maker" Duel** — The duel in which cotton ginning was a contributing factor became so famous that it led to various legislative steps to stop duelling, and to the organization of anti-duelling societies all over the nation. Here is the story of that duel:

In Chesterfield County, S. C., there was a big man, brilliant lawyer, orator and planter, Colonel E. B. S. Cash.

Colonel Cash was fearless, possessed of a high temper, a quick retort, and would deny no man a fight. Yet, he had many admirers and was regarded as a generous man to the poor and needy.

He had a son, W. Boggan Cash, who stood six-feet-four, a brilliant, well-educated man who had a high temper. Boggan Cash studied at the Bigham School in North Carolina, Washington & Lee University, and Virginia Military Institute. While at VMI he was one of the original members of the Sigma Nu fraternity, which was organized there. He graduated there as the ranking cadet captain, and was offered positions teaching military science at military schools all over the country. The Khedive of Egypt offered him the rank of colonel in the Egyptian Army, to help train his army.

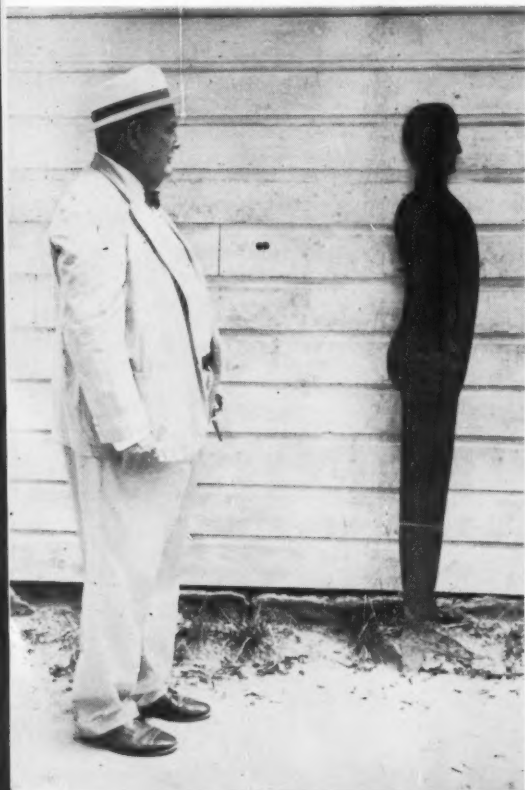
Boggan Cash fought two duels—one with Cantey, who had his vest cut with one of Cash's bullets, but with no serious results.

Boggan Cash also fought Miller Williams, an old schoolmate, as the result of an argument at a horse race. Miller Williams was the grandson of David R. Williams, one of the most constructive governors South Carolina ever had. (It was Governor Williams who built an oil mill on the Pee Dee River, which was only predated by the Waring Mill in Columbia and an oil mill at Natchez, Miss. He also built one of the earliest cotton mills and cotton gins in South Carolina.)

The duel-to-end-duels was fought between Colonel E. B. S. Cash and Colonel Shannon. These men were born the same year and were classmates at the University of South Carolina, and both

(Continued on Page 26)

THOMAS ANCRUM, member of a pioneer South Carolina family, for many years manager of Southern Cotton Oil Co. at Camden, and a student of history who supplied information for this article, is shown on the left with the "Iron Man", silhouette used for duelling practice. Shown below are the pistols used in the "gin-maker" duel which is described in this article.



A stylized illustration of a man from the chest up, wearing a white cotton shirt. He is shown in profile, looking towards the right. The shirt is depicted with dynamic, sketchy lines, suggesting movement and texture. The background is a simple, light-colored oval shape.

the Man in THE WHITE COTTON SHIRT

... is the man you see everywhere. He's the fledgling in the mail room, the young executive with his first private office or Mr. Tycoon himself. For the white cotton shirt is the accepted standard for business or dress by the well-groomed American male. And you can bet your bottom dollar that most of these shirts are made of combed broadcloth.

This medium staple length cotton* looks and feels "quality" without being expensive. It launders well, irons easily, keeps its crisp, new look for the life of the shirt (and combed broadcloth is *mighty* long-lived). Come to think of it, that's just as true of the maize, blue, mint or mauve cotton shirt, too!

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• Ginners Take Tour Of Cotton Mills

AMERICAN Cotton Manufacturers' Institute, Inc., and Arkansas-Missouri Cotton Ginners' Association sponsored a tour of mills for ginners which left Memphis July 22 and arrived in Birmingham that evening for an informal dinner.

The next day, the Institute was host at a breakfast and a meeting on cotton quality preservation. R. C. Moyer, president of the Alabama Cotton Manufacturers' Association and general manager of the Linen Thread Co., Anniston, Ala., gave the welcoming address. Greetings were extended to the ginners by F. S. Love, secretary-treasurer of the Institute.

Informative talks were given by leaders in the cotton industry as follows:

"The Spinner's Problem with Tar Spots", Homer Roberts, Alabama textile executive.

"The Effects of Overdrying on Spinning and Weaving Performance", J. L. Delaney, Joanna Cotton Mills Co.

"The Spinner's Idea of a Properly Ginned Bale of Cotton", Ernest Carpenter, Greenwood Cotton Mills.

"Briefing on the Processing of Cotton in a Textile Plant", John T. Wigginton, American Cotton Manufacturers' Institute.

"The Ginners' Problems in Quality Preservation", Charles Merkel, USDA Ginning Research Laboratory.

After ending the meeting with lunch, ginners visited Continental Gin Co.,

Mississippi Site for Joint Convention

The Edgewater Gulf Hotel at Edgewater Park, Miss., has been selected as the site for the 1957 joint annual convention of the Alabama-Florida Cottonseed Products Association, and the Georgia Cottonseed Crushers' Association.

The date is June 3-4, with privilege of arrival Saturday or Sunday, June 1-2. The Alabama-Florida Association will be host for the convention.

which was host for a social hour and dinner later.

The Institute was host on July 24 for breakfast, a social hour and dinner. During the day, ginners toured Avondale Mills at Sylacauga, Ala.

Ginners left Birmingham July 25 for Decatur, Ala., and a visit through the Chemstrand plant, the final tour. The Chemstrand Corp. was host for a luncheon. From there, ginners left for Memphis.

Seed Distributors To Meet

Arizona Cotton Planting Seed Distributors will hold their annual meeting Aug. 1 at Desert Hills in Phoenix. Three new directors will be elected and other business transacted.

Planted Cotton Beats Stub To Make First 1956 Bale

Planted cotton produced Arizona's first bale on July 17, the first time in history that the first bale hasn't come from stub cotton, Arizona Extension Service reports.

The first cotton of the 1956 crop was reported ginned at Maricopa in northern Pinal County. It came from a March 2 skip-row planting belonging to Jack Ralston of Hidden Valley. Gin turnout was about 34.5 percent.

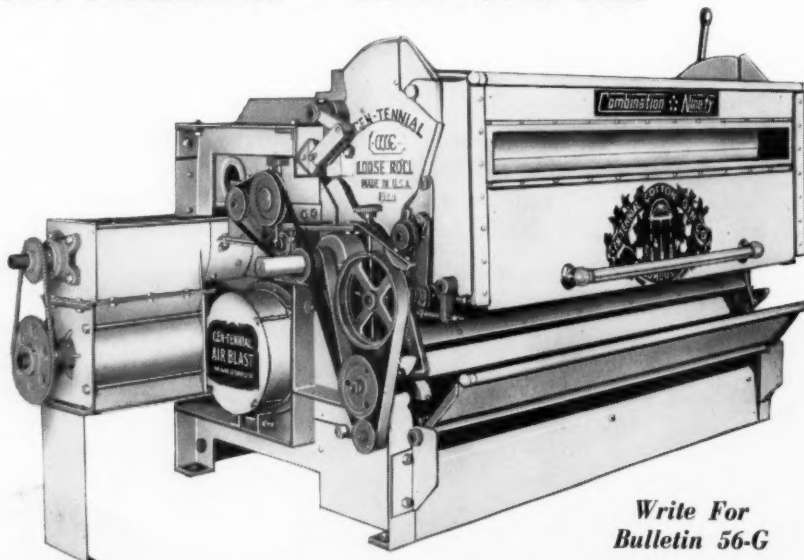
The first stub cotton of the season wasn't ginned until nearly 24 hours later, when two bales were turned out at the South Mountain Gin near Laveen. It belonged to Glenn E. Fields, Maricopa County farmer, and had a 37.99 percent turnout. Van's Palo Verde Gin processed five bales of stub cotton on the same day, reporting a turnout of 37.25 percent. W. G. White of Aztec was the grower.

Meanwhile, Maricopa County's cotton crop continues to make exceptionally good progress. The better fields have as many as 12 mature bolls per plant, about twice the number usually found at this time of year. The middle crop looks especially promising, says Jim Carter, Assistant County Agent.

Extra-long staple, Supima fields on the average are doing as good or better than short staple cotton this season. On both long and short, however, the condition of skip-row plantings indicates that outside furrows need irrigation in order to get maximum benefit of the outside row effect.

The IMPROVED 1956 Model Five Star *Combination* ★★ ★★ *Ninety* "The Perfect Combination — Cleans As It Gins"

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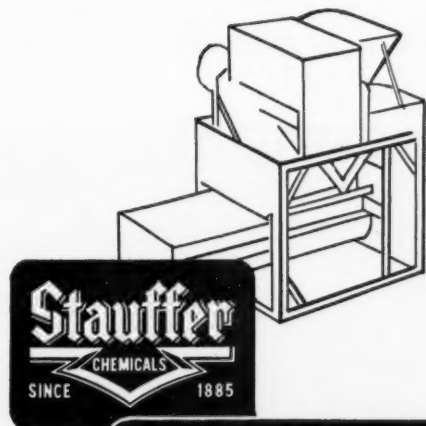
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as viewed from The "PRESS" Box

• Fabrics in 3-D

THREE-DIMENSIONAL FABRICS are being considered as upholstery material for 1957 autos, furniture and other uses, The Wall Street Journal reported recently. "Depth" is given to wool, cotton or synthetic fabrics by weaving in yarns made of polyethylene. These yarns shrink to 55 percent of their length when immersed in boiling water, giving the fabric a 3-D effect.

• Living Costs Higher

LIVING COSTS in June were the highest on record, according to the Bureau of Labor Statistics. The consumers' price index rose 0.7 percent to 11.2 percent of the 1947-49 average.

• Textile Subsidy Set

EXPORT SUBSIDIES on cotton textiles and spinnable waste will range from 3.49 to 9.21 cents a pound, USDA has announced. Rates will be in effect from May 21 to Sept. 30, on exports starting Aug. 1, and are based on the raw cotton content of the product. The basic rate is 6.58 cents per pound for Middling inch cotton at average locations. Subsidies are designed to offset the difference between the domestic cotton price and price of exports from government stocks.

• Soybean Collections

SOYBEANS now are subject to deduction of one-tenth of a cent per bushel, at point of sale, for support of the new Soybean Council of America, Inc. Collections do not start until Sept. 1, but will apply to all sales after July 15.

Contributions are voluntary and, while deductions will be automatic, producers may obtain a refund, if they wish, by application to the Council.

Co-sponsors of the Council are the American Soybean Association, the producers' organization, and the National Soybean Processors' Association. Processors who are backing the Council represent a substantial part of the processing capacity of the nation. Other soybean processors and soybean buyers are being approached and given details concerning the organization.

• Nearly All Hybrids

HYBRID VARIETIES made up 90.8 percent of the corn planted this year, USDA estimates. The Department also reports increasing interest in the hybrid grain sorghums which have become available in the last two years.

• Researchers Need Twins

TWIN CALVES are needed by the University of Arizona for use in research. They must be identical twins, preferably beef calves. The University will pay current prices for the calves, says Al Lane, livestock specialist.

• Is Timber Now King?

TIMBER PRODUCTS, rather than cotton, now have become "king" in the Cotton Belt, according to a lumber publication, "Gulf Coast Lumberman." Ten Southern pine producing states, says the article, have an output of timber products valued at \$4.2 billion yearly. This is almost \$100 million more than the aggregate cash receipts for products sold from farms in the same period,

according to the lumber journal. (No mention is made of the value of farm products utilized on farms.)

• Stalk Borers on Prowl

JUDGING from its behavior, one insect now plaguing Arizona farmers is either just a poor, crazy, mixed-up thing or one of the most mis-named creatures on earth. The lesser corn stalk borer, a small, hungry, blue worm, is doing everything except what its name implies, according to Dr. J. N. Roney, Arizona Extension entomologist. Instead of boring holes in corn stalks, it's sitting around in newly-planted sorghum fields waiting for the seed to sprout. Roney also reports that the word, "lesser," cannot be used to describe the damage inflicted by the pest. He has observed fields in Yuma, Maricopa and Pinal Counties where stalk borers all but wiped out the stand. In fact, he classes the active little critters among the 10 worst insect pests in the state.

• Butter In Dry Product

USDA has announced the sale of 376,289 pounds of CCC-owned U. S. Grade A butter to the Beatrice Food Co., Chicago, for use in making a new dry product for export to Sweden, Switzerland and Finland. The new product, which has a high butterfat content, will be made prior to export from the butter and U. S. -produced nonfat dry milk solids, and will be exported in dry form. It will be used in making cake and doughnut mixes and similar products which are not now being marketed in those countries. Department officials emphasized that this is an experimental sale aimed at developing new foreign markets for U. S. dairy products.

■ MRS. WILMER SMITH, New Home, wife of the president of Plains Cooperative Oil Mill, and JACK CREEL, Lubbock public relations man, recently received 4-H Club awards for outstanding help to 4-H work in District 2 of Texas.

Remember This?



It Was 36 Years Ago, in South Carolina . . .

MEMBERS of the South Carolina Cotton Seed Crushers' Association had gathered for their fifteenth annual convention when this picture was taken on June 18, 1920. Among industry leaders in the group were such men as the late J. J. Lawton.

Ginners' Short Course Planned in Delta

The program for the 1956 Delta Ginners' Short Course will stress operation of gins for quality and efficiency, according to T. M. Jones, Cleveland, chairman, Delta Council ginning improvement committee.

The short course will be Aug. 2-3 in the Washington County Courthouse, Greenville, Miss. It is sponsored by the ginning improvement committee and the Mississippi Extension Service, with cooperation from the U. S. Cotton Ginning Laboratory, gin machinery manufacturers, and oil mills of the Delta area. Registration is scheduled for 9 a.m.

Jones said that the program had been revised to provide for a demonstration of the use of steel strips for cotton bale ties.

One of the highlights of the Aug. 2 session will be a discussion of the effects of harvesting and ginning on mill performance, by Robert W. Smith, manager, cotton department, M. Lowenstein and Sons Mills, Anderson, S. C.

Other subjects will include: "Need for Better Ginning," E. D. Joiner, Clarksdale, president, Southern Cotton Shippers' Association; "Pre-Harvest Cultural Practices and Defoliation," T. M. Waller, cotton specialist, State College; "Operation of Mechanical Pickers to Maintain Quality," E. B. Williamson, agricultural engineer, USDA, Stoneville; "Cotton Quality and Markets," Vernon Moore, cotton technologist, USDA; "The Ginner's Prob-

lem in Quality Preservation," C. M. Merkel, engineer in charge, USDA Ginning Laboratory, Stoneville.

Oil mills of the Delta area will be hosts to gin owners and operators for a barbecue luncheon at noon on Aug. 2.

Other highlights of the meeting are a discussion on handling and storage of seed cotton and a panel discussion of, "Operation of Modern Ginning Plants to Meet Harvesting Requirements."

Members of the panel include: J. C. Oglesbee, Jr., cotton ginning specialist, USDA, Atlanta, Ga., moderator; C. M. Merkel, Stoneville; C. A. Bennett, principal engineer, in charge, ginning investigations USDA; Vernon Moore and John E. Ross, senior agricultural economist, USDA Cotton Laboratory, Stoneville.

Gin machinery manufacturers will be in charge of the program on Aug. 3. Ginners will be divided into classes according to the make and type of equipment in which individuals are most interested.

Producers Gin at Hamlin Burns, Friday, July 13

Bill Smith of Abilene, Texas, who is widely known among ginners of the Southwest and other areas as a dealer in gins and gin equipment, reports that Friday, July 13, was an unlucky day for him. On that date the Producers Gin at Hamlin, Texas, was burned. The cause is not known, although the fire may have started from sparks resulting from welding on a nearby water tank.

Study of Soybean Exports Summarized by USDA

"Study of Sampling and Grading of U. S. Soybeans for Export" is a USDA publication providing useful information for soybean exporters. E. A. Shaw, the author, was a member of a four-man team which studied the problem on a tour of Europe, at the suggestion of the International Association of Seed Crushers.

Copies of the report are available from Foreign Agricultural Service, USDA, Washington 25.

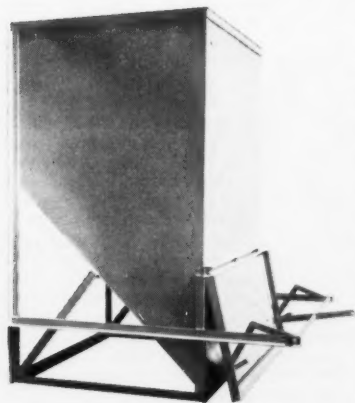
Maid of Cotton Contest Scheduled at Lubbock

Plans for the regional Maid of Cotton contest at Lubbock on Nov. 19-20 were discussed at a committee meeting on July 23. The event will be held at the Lubbock Auditorium.

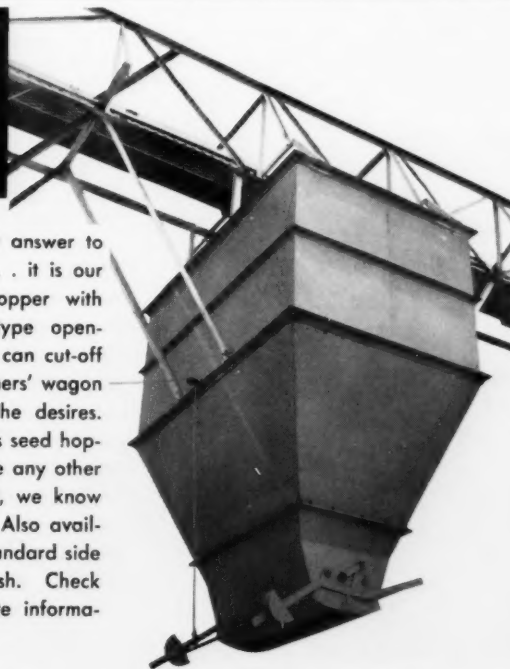
Charles Signor is chairman of the contest committee, with the following members: Fred Underwood, Dixon White, Raymond King, Jack Creel, Darwin Prince, Weldon Gibbs, Frank Junell, E. W. Williams, John Gregg, Jim Edd Waller, James G. Allen, Mrs. John R. Moxley, Mrs. M. K. Dean, Jaqueline Sterner, George Pfeifferberger, Jim Crook, Gordon Rose and Howard Whitfield.

Roy Forkner is chairman of a special subcommittee, composed of Mrs. John R. Moxley, Dixon White, Darwin Prince, Mrs. M. K. Dean, Mrs. Wayne Prather, Jim Ed Waller, James G. Allen and David Blackburn.

SCISSOR-TYPE OPENING ANSWER TO SEED HOPPER PROBLEMS!



Yes, Ginners, here is your answer to Seed Hopper problems . . . it is our 5-Bale Customer Seed Hopper with center discharge, scissor-type opening. With this hopper you can cut-off the loading of your customers' wagon for any amount of seed he desires. Ginners who have used this seed hopper say they would not use any other kind. Once you've used it, we know you'll say the same thing. Also available is the 2 and 3 Bale standard side opening hopper if you wish. Check with us today for complete information.



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Mr. Chairman, Ladies and . . .

■ HERBERT A. LEGGETT, often called Mr. Leghorn or Mr. Legg, speaks on the subject of speakers in this article from *Arizona Progress*, a publication of the Valley National Bank, Phoenix.

"MR. CHAIRMAN, LADIES AND GENTLEMEN," are the most ominous words in our language, says Herbert A. Leggett, editor of *Arizona Progress*, Phoenix, in an article that will be enjoyed by almost anyone who has ever heard or delivered a speech. Of the conventional phrases opening a talk, Leggett says:

"They are the forerunner of more boredom and anguish, both mental and physical, than any others known to man. They mean that someone is about to launch into a speech. This is usually preceded by a meal of sorts and some precautionary doses of Old Pain Killer to dull the agony.

"As a frequent offender on the Pot-Roast-And-Cold-Peas Circuit, we offer no alibis but do allege that speakers themselves are sometimes as sinned against as sinning. We often ask ourselves, rhetorically, why anyone in his right mind ever makes a speech. And Echo always answers with ghoulis laughter that 'No one does'. But, not being very bright, we continue to accept invitations, sweat out the preparation, lose sleep, ruin our digestion, and then profess pleasure at the opportunity of addressing such a distinguished assemblage.

"Usually when we are called on there is little left. No sooner are we introduced than people start looking

furtively at their watches. By nature timid, we take the hint and discard our notes. Most of our preparation has been for naught. So we just ramble incoherently for a few minutes—and sit down. The audience applauds gratefully. Brevity, we have discovered, is more highly cherished in a speaker than brilliance or profundity.

"However, a speaker's rostrum is no place for a thin skin or jittery nerves. One must learn to take collapsing microphones, rattling dishes and police sirens in stride. Not to mention program chairmen. One's name is an incidental of minor importance. Phonetically there are many ways to spell our name and, not unexpectedly, we often appear in convention programs minus one 'g', minus one 't', or with any of the standard vowels in place of the 'e's' legally bequeathed to us. We have been introduced variously as Mr. Legg, Mr. Leghorn, Mr. Leavitt, Mr. Levy, Mr. Claggett, Mr. Goettl, Mr. Egbert and, in the heat of one political campaign, as 'the next president of the United States.'

"Thank you, kind friends, for your courteous attention. If this little plaint results in no more invitations to speak, that is all right with us, too."

■ DAN DAVIS, Lubbock, is the new manager of Plains Cotton Co-op Association.



She's No Square, But He's Counting Them

COUNTING THE SQUARES in the Maid of Cotton's dress is more fun than counting squares in a cotton field, and it's obvious that USDA Statistician John J. Morgan enjoys his work. It took about five square yards of cloth to make this dress worn by Patricia Anne Cowden and Morgan figured out that this was the equivalent of 1,600 squares on the cotton plant, including those that failed to stay on the plant. An old thumb rule among cotton farmers is that one-fourth of the squares will make cotton, for the information of those more interested in plants than in Patricia.

Acetoglyceride Process Patent Now Available

A basic patent on the preparation of the chemically-modified fats known as acetoglycerides has just been granted and is now available for licensing without cost, USDA announces.

The patent was granted to Reuben O. Feuge, Earl J. Vicknair, and Klare S. Markley, as a result of work done at the Southern Utilization Research Branch of the Agricultural Research Service, USDA. It is U. S. Patent No. 2,745,749, "Glyceridic Mixtures Exhibiting Unique Properties and Process for Their Production." Copies may be purchased for 25 cents each from the U. S. Patent Office, Washington.

Investigations leading to issuance of the patent were concerned with cottonseed, soybean, peanut, and other vegetable oils. It was found that acetylation of monoglyceride mixture of these oils with fatty acids containing two to four carbon atoms yielded products with a number of unique and desirable properties.

Some of these products are flexible, wax-like, and non-greasy in texture, and appear to have many possibilities for use in the food industry, such as coatings for meat products, cheese, candies, ice cream bars, and other food. Melting points of acetoglycerides can be varied for special requirements, and some of the products hold the desired texture over a relatively wide range of temperature. Another advantage of the acetoglycerides is their resistance to oxidation, or rancidity. Aside from food and cosmetic uses, they also show great possibilities as plasticizers, lubricants, etc.

More Oils Futures Trading, Cotton at 10-Year Low

Futures trading in grains and fats and oils increased during the fiscal year ended last June 30, USDA reports, but cotton trading was at a 10-year low.

Activity in soybeans, principally on the Chicago Board of Trade, amounted to 5,541,841,000 bushels, which was a larger volume than in any previous fiscal-year period, and accounted for more futures trading in the Chicago market than any other commodity.

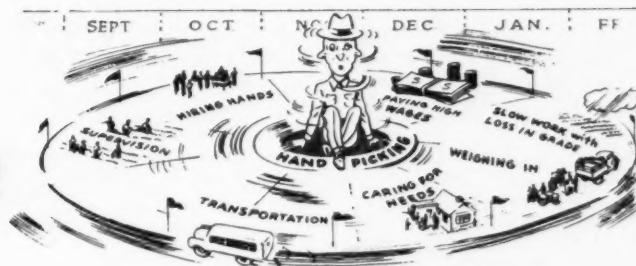
Cotton futures trading, primarily on the New York and New Orleans cotton exchanges, declined to the lowest level in 10 years. The volume on all markets amounted to 39,594,000 bales, compared with 50,395,000 bales in 1954-55, and 37,813,000 bales in 1944-45—the last year with a lower trading volume.

Trading in fat and oil futures, influenced by active domestic and export demand, increased markedly over the previous year. The soybean oil volume, largely on the Chicago Board of Trade, amounting to approximately 8.2 billion pounds compared with 4.3 billion in 1954-55, was much the largest on record for the commodity.

Maid Ending 1956 Tour

July 30 will mark the official end of the activities of the 1956 Maid of Cotton, Patricia Cowden. Memphis District Ford Dealers will present her with a car on that date, at the end of her tour of the U. S. and a number of foreign countries.

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MERRY-GO-ROUND**



CUT COSTS...SAVE TIME...

Mechanize with a John Deere Cotton Picker or Stripper

IT'S costs that steal profits at picking time—that's why more and more cotton growers are abandoning old-fashioned, hand-picking methods. They're cutting costs . . . saving time with John Deere Cotton Pickers in open-type cotton and the outstanding John Deere Stripper in stormproof varieties.

Let's compare hand picking with the advantages of John Deere mechanization. You're on a real merry-go-round when you pick by hand. First, you hire your pickers—if you can get them. Many times competition is keen—the price skyrockets—you either pay the price or you're left holding the bag.

Yet, one man and a John Deere Picker or Stripper replace a small army of hand pickers—and you pocket the savings.

Besides having to pay high wages for hand pick-

ers, you have to furnish transportation, perhaps provide quarters, supply water and other "necessities," supervise picking, and weigh in cotton—every job slow, costly—every one a headache.

You'll have none of these headaches with a John Deere Picker or Stripper on the job.

Then, there's the matter of time! With hand pickers, the months roll by . . . work drags on . . . and every bit of bad weather reduces the grade.

You'll speed picking . . . reduce losses from weather with a John Deere Picker or Stripper at work in your fields.

Get off the merry-go-round this year! There's a John Deere Cotton Picker or Stripper that's just right for your operations. See your John Deere dealer. Write today for free descriptive literature.



The spindle-type John Deere No. 1 One-Row Mounted Picker picks up to an acre per hour. A two-row self-propelled picker—the No. 8—picks up to 1-3/4 acres per hour.



The John Deere No. 16 Two-Row Mounted Stripper for stormproof cotton strips plants clean once-over.



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Please send me free literature on the following cotton harvesting machines:

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Duelling

(Continued from Page 18)

led regiments in the Civil War. They were friends and were often taken for each other.

Colonel Cash became angered when he thought his wife had been insulted in a lawsuit. Colonel Shannon, a quiet and reserved man, assured Colonel Cash that no insult was intended, and everyone thought the incident was closed.

However Boggan Cash was not satisfied with the apology, nor was Captain Robert Ellerbe, a brother-in-law of Colonel Cash. They kept the fire hot with remarks or printed articles. Captain Ellerby sent a challenge to Colonel Shannon, which he ignored.

Boggan Cash published a leaflet called the "Camden Soliloquies", and in this he touched on Colonel Shannon, both in his private and public life. As a sample of the things he wrote about Colonel Shannon, there was some doggerel, entitled "My Daddy Was a Gin Maker"

My daddy was a gin maker—
And worked cheek and jowl,
With Ellison, a negro,
(Tis a secret of my soul.)

My daddy was a gin maker—
Worked on old saws.
I am stealing Billy,
An expounder of the laws.

My daddy was a gin maker—
A damned old fool was he,
I made my money,
By bridging the Wateree.

My daddy was a gin maker—
Damn such an occupation,
I can live by swindling,
And on my reputation.

My daddy was a gin maker—
No fighting man was he,
And as long as I have legs to run,
No man will shoot at me.

The stigma of owning and making gins was a puzzle to Shannon's friends. They could not understand the ridicule for Shannon's father was a bank president, merchant and large planter and manufactured gins also.

But all of the ridicule and caustic letters from Colonel Cash finally caused Shannon to challenge him to a duel. The duel was fought between Camden and Darlington, and Shannon was killed.

A widow and 13 children survived Shannon, and South Carolinians were horrified at the incident. A strong rebellion against duelling was created, and many anti-duelling societies were organized, determined that there would never be another duel fought in South Carolina. And there were no more duels.

Cash was tried for murder, but acquitted after a mistrial. Boggan Cash later killed a policeman in Cheraw, and mortally wounded a bystander. Cash was killed by a posse which tracked him down 10 miles below Cheraw.

As a sequel to the relationship between the cotton industry and this duel, it is interesting to note that a nephew of Colonel Shannon was prominent in the industry until a few years ago. He was the late C. J. Shannon, who long served as president of the Palmetto Oil Mill at Bishopville, S. C., and a director of the Kershaw Oil Mill.

Cotton Subcommittee To Meet in Dallas

The subcommittee on improvement of cotton and cottonseed of the Statewide Cotton Committee of Texas will meet at 9 a.m., July 30, in the English Room of the Baker Hotel in Dallas. Dr. Earl E. Berkley, Houston, director of the Anderson, Clayton & Co. fiber and spinning laboratory, is chairman of the subcommittee.

Export Cotton Released At Earlier Date

CCC began on July 23 releasing cotton sold for export after Aug. 1. Purpose of the earlier release date is to help relieve congestion and expedite shipment, and the action was recommended by industry groups, USDA points out.

Cooperatives Meeting

Three thousand members of farm cooperatives and youth organizations are in Raleigh, N. C., for the twenty-eighth summer meeting of the American Institute of Cooperatives. "Cooperatives: Key to Farm Progress," is the theme of the five-day meeting, starting July 30.

Twenty-Fifth Anniversary Observed by Crushers

July 18 marked the twenty-fifth anniversary of the consolidation of the cottonseed crushers' organizations in Arkansas and Tennessee. An item in the Memphis Commercial Appeal on July 18, 1931 said:

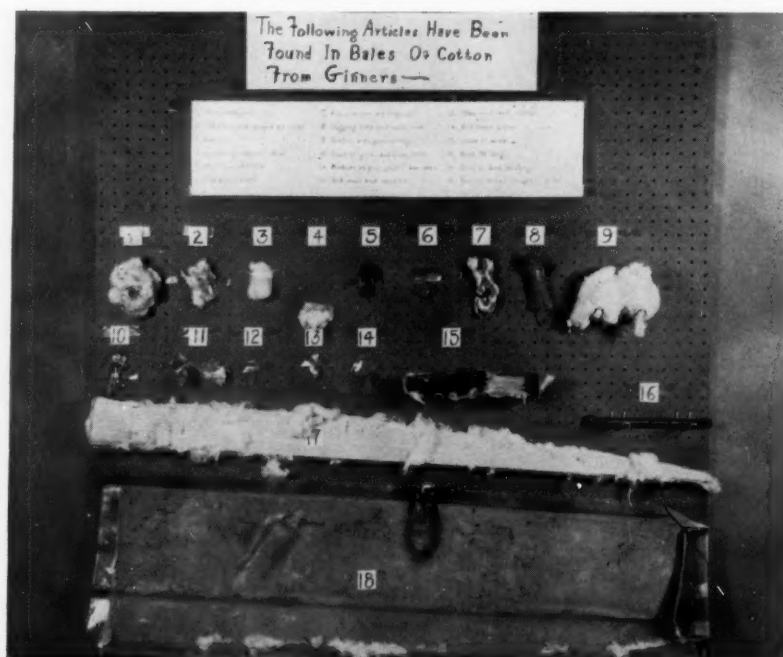
"The Tennessee and Arkansas divisions of the National Cottonseed Products Association have been combined in the interest of economy. F. M. Moulton of Pine Bluff, T. H. Gregory and Clarence E. Garner are the officers of the merged group."

Circular on Irrigation Is Issued by New Mexico

"Irrigation Siphon Tubes", by J. Leo Dirinberger, is the title of a new circular released by New Mexico Extension Service.

The bulletin tells how to use siphon tubes to control irrigation water for row and close-growing crops.

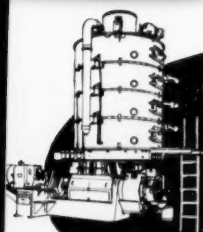
Copies of the circular, No. 266, are available from the Department of Information, New Mexico A. & M. College, P. O. Box 757, State College.



Foreign Matter in Bales Causing Trouble

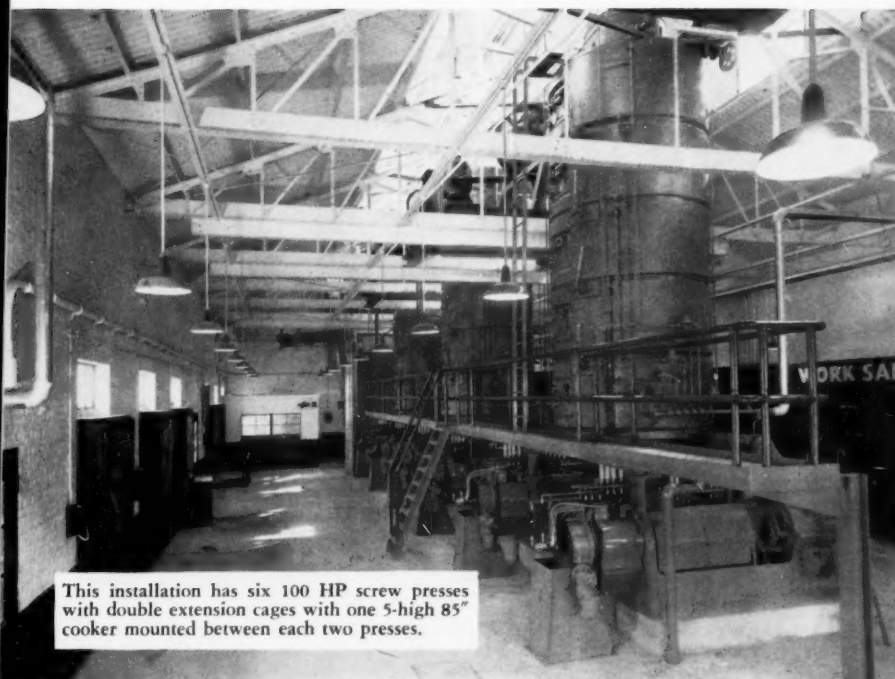
WHY MILLS keep talking about bale contamination is obvious from this picture, which should help to remind gin employees of the importance of keeping foreign material out. It shows some of the things that Greenwood Mills, Greenwood, S.C., found in cotton bales last year. Numbered in the photograph are: 1. Cotton from bale with a good bit of purple stencil; 2. & 3. Card strip or flat strip and piece of card sliver—contains shredded blue cloth. (This was shredded by the card after it had begun to be processed); 4. Pink upholstery material; 5. Blue filament cloth; 6. Red print cloth; 7. Large nail and jute; 8. Bagging (previously used—still had dyed waste on it); 9. Cotton (Green strings mixed through it); 10. Green and black cloth; 11. Gray, green and blue cloth; 12. & 13. Red and blue wool knit sweater material; 14. Red crepe paper; 15. Chunk of wood; 16. Bolt (9½" long); 17. Piece of wood (48" long); and 18. Piece of sheet metal (weight 12 lbs.).

"Any of the colored cloth shown," comments H. C. Culbertson of Greenwood Mills, "that might slip past the eye and get into the process would cause trouble in several thousand yards of cloth finished in white or light shades."



MORE PROOF OF UNQUESTIONABLE LEADERSHIP OF FRENCH SCREW PRESSES

and the reason why so
many mills are installing
FRENCH SCREW PRESSES



This installation has six 100 HP screw presses with double extension cages with one 5-high 85" cooker mounted between each two presses.

The results obtained by French Screw Presses from coast to coast speak for themselves and offer proof of the efficiency and ease of operation which you can expect. In large mills and small mills, French Screw Presses are consistently producing highest quality premium products . . . with low operating costs and a minimum of maintenance. For example, a Mississippi mill with the latest type French Screw Press reports these average figures for the month of December:

Daily throughput.....	80 tons cottonseed a day
Moisture in cake.....	3.78%
Oil in cake.....	2.77%
Ammonia in cake.....	8.22%
Standard	33.50%

REPRESENTATIVES

East of Mississippi
Arkansas and Louisiana

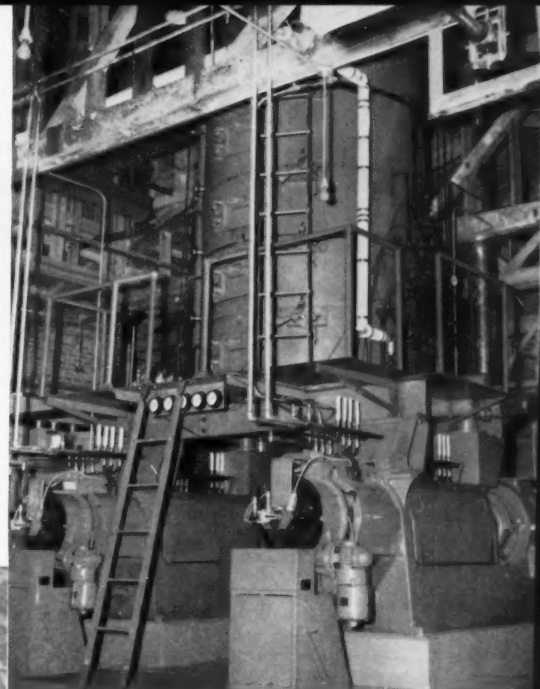
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Shown above are two 100 HP screw presses with double extension cages with a 5-high 85" cooker mounted between the two presses.

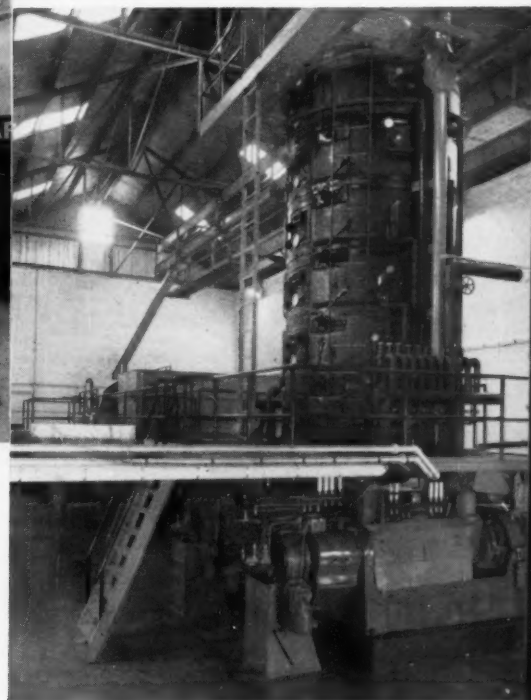


Photo above shows two 100 HP screw presses with double extension cages with a 6-high 85" cooker mounted between the two presses.

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from our Washington Bureau

by FRED BAILEY

WASHINGTON REPRESENTATIVE

The COTTON GIN and OIL MILL PRESS

• **"Little Fellow" in Trouble** — The man the politicians describe as "the little fellow"—in business as well as on the farm—has been getting a lot of attention lately here in Washington. Whether it is election year jitters, or what, prompting the official and legislative concern, there is no doubt that small businessmen and farmers are in trouble.

Their troubles, summed up, constitute a national crisis. Fact is that the small operator is losing ground to the "bigs" at an alarming rate. Nobody on the farm has been making much money, but the man with the modest acreage has made much less than in the past. In many cases, he has lost money and gone out of farming.

The trend is reflected in the sharp drop in the number of cotton allotments; in the increasing size of farms and decreasing number of farmers; in the fact that farming has become a part-time affair on nearly one-third of the nation's farms. Last year one million nominal farmers, or about 20 percent of the total, made at least half their cash income from non-farm jobs.

Position of the small businessman has deteriorated, perhaps as much as the small farmer's. The Senate Small Business Committee came up the other day with a report containing some arresting figures.

Small companies, identified as those with assets under \$250,000, the committee reported, averaged only 0.95 cents profit per dollar of sales in the first half of 1955. Profit of larger companies, those with assets of more than \$100 million, on the other hand, averaged out at 7.2 cents.

The figure for the "smalls" in 1952, the committee reported, was 2.3 cents, and for the "bigs", 5.7 cents.

The senators view this situation with alarm, seeing an "ominous significance in an economic atmosphere which makes it possible for the nation's mammoth corporations to reap record profits while the general run of small enterprises are worse off than they were three years ago."

• **Why Is This Happening?** — Does the trend to size simply mean that the small operation is inefficient; that the small operator therefore ought to be squeezed out? Sometimes, yes; many times, no. Small but aggressive independents who simply want to be left alone to do their job are often forced out by discriminatory practices, by policies of government that contain built-in advantages for bigness, or by circumstances beyond their control.

A single circumstance, such as weather, can ruin good farmers. Consider some recent USDA figures on the hourly labor return last year of farm operators and their family labor. Sheep and cattle ranchers in the drouth-stricken South-west showed a loss per hour for their

labor ranging from an average of \$1.52 to \$2.30. In one part of North Dakota where weather was favorable, wheat-livestock producers averaged a profit of \$1.36 per hour on their own and their family's labors. The figure was three cents per hour in another part of the same state where poor weather all but ruined crops.

Does a cotton grower's location favor irrigation? If so, circumstances are on his side, and he may make money while an equally efficient operator on non-irrigated land makes nothing. Labor return to growers in the non-irrigated High Plains of Texas last year averaged 39 cents per hour. The figure was \$1.77 per hour on irrigated farms in the area.

• **Cotton Program Involved** — The big-vs.-small problem has now become entangled with the government's new cotton export program. Sales abroad at world prices, decreed by Congress, will bring a big rise in exports next season,

perhaps to the historic five-million-bale figure being predicted. More than half that amount already has been sold out of government stocks for export between July 27, 1956, and Aug. 1, 1957.

Buyers may, if they like, sell cut-rate cotton purchased from the government on the domestic market, putting up \$30 bond per bale as a guarantee that an equal amount will be exported before Aug. 1 of next year. Buyers figure to make a bit more than \$30 per bale on cotton sold in the domestic market. But doubts are growing as to whether they can subsequently buy an equal amount for export and make a profit.

Feeling is that many buyers will elect to forfeit bond. The alternatives will be to pay premium prices for loan cotton, or to buy new-crop fiber at supported prices—then, perhaps, sell at a loss abroad. Foreign prices appear to be going down under pressure of the new U.S. export policy.

Right after 25.5 cents per pound had been established as a minimum price under the program, foreign growers started offering cotton just under that level.

To preserve the market machinery, especially small traders, many in the cotton industry now think the export program should be changed—along lines of the new wheat plan announced the other day by USDA. This would mean payment of export subsidies in kind; that is, in cotton.

The wheat program, taking effect Sept. 4, will require withdrawal of almost all export wheat from free market

Machine Is Very Rare, But

"It's Not First Power Gin"

■ CHARLES A. BENNETT, authority on cotton ginning history, gives facts about unit which was believed to have been original power unit made by Eli Whitney.

A MACHINE which has been called "Eli Whitney's first power gin" and was purchased to be placed in a museum in Savannah, is actually a gin spinner, according to Charles A. Bennett, principal engineer in charge, cotton ginning investigations, USDA, Stoneville, Miss. A student of ginning history, Bennett wrote The Press the following letter, after seeing Georgia newspapers and the article based on them published in The Press:

"We regret to inform you that this unit was investigated by us in person on Feb. 23, 1934, at the request of our chief engineer, who was in contact with the Smithsonian Institution and the U.S. National Museum. This unit was photographed by us at the home of Mr. J. Luke Burdette near Washington, Georgia, and in our opinion is either a McBride or Pearse gin-spinner which was made in Cincinnati about 1825. There were original copies of old Cincinnati newspapers of that date pasted to the carding drum of the unit, which had also the saws and ribs of Hogden Holmes and later models than the first Whitney unit. It is obvious that Whitney did not attempt to make a yarn machine and cotton gin at the same time in his first invention, and his own description and drawings of the first gin have been fully publicized by Professor D. A. Tompkins in his two volumes 'Cotton and Cotton Oil' that were released in 1901.

"These old gin spinners are very rare and represent an attempt to make it possible for plantations to provide yarn and weave the clothing of their own workers. We have one type of that unit here at Stoneville, Miss., and there are one or two in the Smithsonian at Washington.

"The Southeastern Cotton Ginning Research Laboratory of the U.S. Department of Agriculture has on display at Clemson, S.C., through the courtesy of the Clemson Textile College, a working model of the Eli Whitney spike gin with its wire teeth and other peculiar features. Professor Tompkins made this restoration from fully authentic information on file in the Federal Courts at Savannah and elsewhere. Consequently, we regret to advise you that in our opinion the unit illustrated in the recent Georgia papers is not Eli Whitney's first power gin."

An article by Bennett on the world's two gins will appear in an early issue of The Press.

supplies instead of government stocks. After buying wheat on the market, exporters will be issued government-held wheat, its value to make up the difference between the lower foreign price and the price on home markets.

Other actions have been taken, or are being started, to look to the special problems of the small businessman and farmer. Senator Edward Thyne of Minnesota, ranking GOP member of the Senate Small Business Committee, has recommended these measures to the Republican administration: (1) Support of the White House for legislation to provide tax relief measures that will give small firms more working capital. (2) Expansion of the President's Cabinet Committee on Small Business to put some punch in its efforts to strengthen small business. (3) To establish the present Small Business Administration as a "permanent" agency of government.

To work on the problem of low-income farmers, the Agriculture Department has \$2 million to spend in the current fiscal year. Test programs are being set up in selected counties "for increased educational, technical, administrative and research services." Other agencies of government, including the Office of Education and Employment Service, have additional amounts totaling about \$3 million to assist in the effort to raise living standards in rural areas of low income.

F. H. Ferrell Will Manage Oil Mill at Osceola

F. H. Ferrell, who has been manager of West Memphis Cotton Oil Mill, has been named manager of Osceola Products Co., Osceola, Ark. Ferrell succeeds Ralph Woodruff, whose appointment as manager of Delta Products Co., Wilson, Ark., was announced earlier in The Cotton Gin and Oil Mill Press.



Joins Council Staff

DORMAN H. LOTT has joined the National Cotton Council staff as Georgia field representative. Lott attended Berry College at Mt. Berry, Ga., and graduated from the University of Georgia school of agriculture in 1952. He served as assistant county agent with the Georgia Extension Service, and was agricultural manager of the Macon Chamber of Commerce prior to joining the Council. He is married and has two children.

More Vegetable Oils, Less Oilseeds for Denmark

Danish oil mills are finding it difficult to market domestically produced oils due to the stiff competition from imported oils USDA reports. Therefore, more raw oils may be imported at the expense of oilseeds, but Denmark's overall 1956 trade in oilseeds, fats and oils is expected to remain about the same as last year.

The acreage of oilseeds for harvest in 1956 is roughly 24,700 acres, down slightly from 1955. This decrease is primarily due to smaller plantings of winter rape whose acreage, totaling 4,900 acres, is only about two-thirds of the acreage in 1955.

Danish imports of soybeans, which came entirely from the U. S. in 1955, are likely to show a different picture in

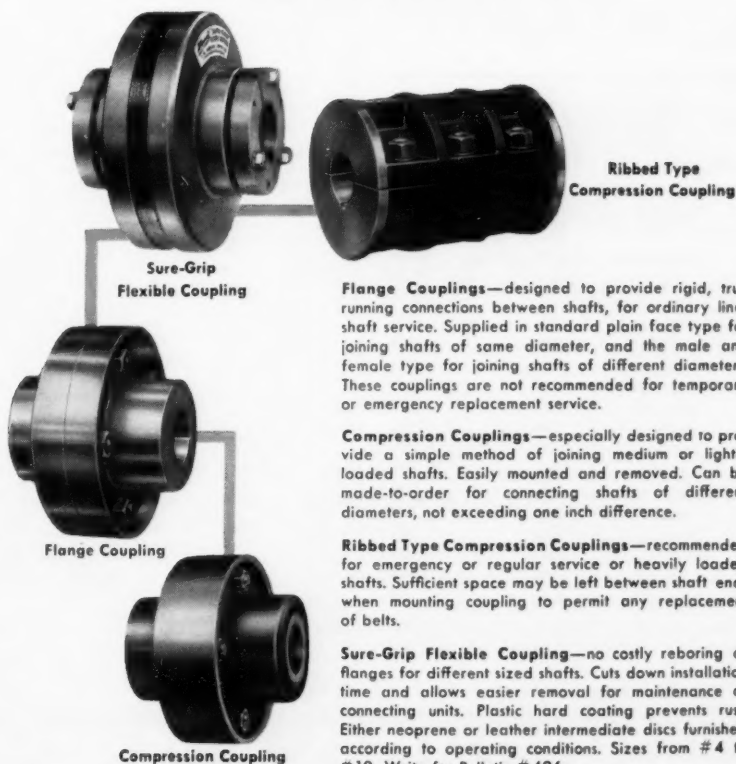
1956. The first cargo of Manchurian soybeans, approximately 5,500 short tons, was unloaded in Copenhagen in the middle of April. If available, additional imports of the Manchurian beans undoubtedly will find their way to Denmark, says Foreign Crops and Markets.

Give Them Cotton Rope, and Flies Will Hang Selves

Give them enough cotton rope, and flies will hang themselves (more or less), the National Cotton Council reports. A cotton cord impregnated with parathion has proved effective in fly control tests by the U. S. Public Health Center at Savannah, Ga. The cord, strung across the interior of any building, makes a good landing place for flies, which are killed almost immediately by the poison.

Couplings

for ordinary, medium or heavy duty service



Flange Couplings—designed to provide rigid, true running connections between shafts, for ordinary line-shaft service. Supplied in standard plain face type for joining shafts of same diameter, and the male and female type for joining shafts of different diameters. These couplings are not recommended for temporary or emergency replacement service.

Compression Couplings—especially designed to provide a simple method of joining medium or lightly loaded shafts. Easily mounted and removed. Can be made-to-order for connecting shafts of different diameters, not exceeding one inch difference.

Ribbed Type Compression Couplings—recommended for emergency or regular service or heavily loaded shafts. Sufficient space may be left between shaft ends when mounting coupling to permit any replacement of belts.

Sure-Grip Flexible Coupling—no costly rebor-ing of flanges for different sized shafts. Cuts down installation time and allows easier removal for maintenance of connecting units. Plastic hard coating prevents rust. Either neoprene or leather intermediate discs furnished according to operating conditions. Sizes from #4 to #10. Write for Bulletin #496.



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Classified Advertising

RATES AND CLOSING DATES: Ten cents per word per insertion. Include your firm name and address in making word count. Minimum charge \$2.00. Copy must be in our hands by Thursday morning of week of issue. Please write plainly.

Oil Mill Equipment for Sale

FOR SALE—Anderson Super Duo expellers. Filter presses. 72" and 85" cookers. Butters milling machine. Carver 176-saw Tru-line Gummer. Double box linter press. Attrition mills. Single drum hull beater. 20" to 70" fans. Motors: 75 h.p. and under.—Sproles & Cook Machinery Co., 151 Leslie St., Telephone PR-5958, Dallas, Texas.

OIL MILL EQUIPMENT FOR SALE—Rebuilt twin motor Anderson high speed expellers. French screw presses, stack cookers, meal coolers, fourteen inch conditioners, filter presses, oil screening tanks, complete modern preprocessing or single press expeller mills.—Pitcock & Associates, Glen Riddle, Pa.

FOR SALE—Filter presses; screening tanks; single and twin motor Anderson Super Duo expellers, with conditioners; several extra 36" cooker dryers and conditioners. All steel linter baling presses; 141-176 saw linters; seed cleaners; No. 163 separating units; bar hullers; lint beaters; stack cookers; rolls; hydraulic press room equipment.—V. A. Lessor & Co., P. O. Box 108, Fort Worth, Texas.

INSPECTIONS and appraisal. Dismantle and installation.—Oscar V. Shultz, Industrial Engineering, Phone BUTler 9-2172, P. O. Box 357, Grapevine, Texas.

FOR SALE—Two Model PA Quad Die Helm pellet machines for pelleting solvent extracted meal. Complete with two stack cookers, drags and breaker rolls. Good condition and priced to sell.—General Vegetable Oil Company, Sherman, Texas.

FOR SALE—One No. 8 Bauer Bros. ballbearing cake breaker and one 26" Sprout-Waldron attrition mill, belt driven. Both in good condition and a bargain.—Farmers Cotton Oil Co., Telephone Dickens 2-5328, Winnsboro, Texas.

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150	Slipring	900	1566
300	Sq. Cage	900	1481
150	Sq. Cage	900	1188
100	Slipring	1200	1076
100	Slipring	900	1189
100	Sq. Cage	1200	768
100	Sq. Cage	900	879
75	Sq. Cage	1800	490
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FOR SALE—Used 176- and 141-saw Carver linters with pneumatic units; also filters, gummers, elevating and conveying equipment and other miscellaneous oil mill equipment. All in excellent condition.—Valley Machinery & Supply Co., P. O. Box 2252, DeSoto Station, 612 N. Main St., Memphis, Tennessee.

Gin Equipment for Sale

FOR SALE—Cotton gins, oil mills, compresses. Contact M. M. Phillips, Phone TE6-8655, P. O. Box 1288, Corpus Christi, Texas.

FOR SALE—One complete 4-80 saw Murray plant with special Super Mitchell feeders, 14' Hardwicke-Etter bur machine and practically new Buda engine, with gin buildings and approximately 1½ acres of land, located in Throckmorton County, Woodson, Texas. This plant for sale at an attractive price and to be operated at location. For price and detailed information, contact R. B. Strickland & Co., 13-A Hackberry St., Telephones: Day 2-8141, Night: 3-7929, Waco, Texas.

FOR SALE—Cotton gin, So. W. Tenn. Excellent profits. Ideal location. Also handles cotton and seed sale. 1.58 acres land with all buildings included. Fully equipped. Other interests force sale. Priced low.—Dept 7633, Chas. Ford & Assoc., Inc., 6425 Hollywood Bl., Los Angeles 28, Calif.

FOR SALE—Two good hydraulic ram casings for quick sale, \$25 each.—Wewoka Flower Shop, 111 West Second, Phone RAMage 658, Wewoka, Okla.

GINNERS—If you want a good gin in irrigated territory, contact Box PA, c/o The Cotton Gin and Oil Mill Press, P. O. Box 7985, Dallas, Texas.

FOR SALE—One set Howe 34' scales. Gins: 1-90 Murray Safety, 7-90 Gullett, 1-80 Lummus 1949 model, glass front double mote, 1-80 saw Continental Model C brush with 30 fronts, 3-80 Continental Model C brush, 6-80 Murray glass front loose roll dump, 4-80 Cen-Tennial air blast with loose roll boxes and glass fronts, 5-70 Continental Model C brush with 30 fronts. Driers: One 16-shaft Hardwicke-Etter tower drier complete with burner, piping and fan, two Murray Big Reel, 5-80 Mitchell, two Lummus thermo cleaners, Bur machines: One Hardwicke-Etter 14' steel and one wood. Airline cleaners: One 4-cylinder V-drive Stacy, one 6-cylinder Hardwicke-Etter. Cleaners: One 8-cylinder Stacy with hot air attachments, one Hardwicke-Etter 7-cylinder blow-in type, one 5-cylinder Hardwicke-Etter V-drive blow-in type, one 5-cylinder V-drive No. 2 Hardwicke-Etter, 2 Continental inclined 4-cylinder all-steel. Huller-cleaner-feeders: 5-60" V-drive Super Mitchell, 5-66" V-drive Special Standard Mitchell, 3-66" V-drive Continental Master XX. Condensers: 1-48" and 1-36" Continental side discharge. Separators: 4-72" Murrays. Pumps: 2 Lummus. Miscellaneous items: 1 Mitchell vaporizer, 1 Hardwicke-Etter burner, various size fans, one double 30" Murray fan, one rock and boll catcher, 5-70 Lummus change valve hoppers, 1-72" and 1-52" Murray vacuum, 4-72" Murray cleaning cylinder with bearings. Engines: One L3000 Le Roi, one 280 h.p. Le Roi, one MM Twin six 210 h.p., one MM 240 h.p., 6-cylinder. Electric motors: Sizes from 3 to 150 h.p., 440 volt.—Bill Smith, Box 694, Phones 4-9626 and 4-7847, Abilene, Texas.

FOR SALE—To be moved. One complete 4-80 outfit, less power and scales. Major items consist of four latest model 80-saw Murray gins, Super Mitchell, Mitchell conveyor distributor, 14' Hardwicke-Etter steel bur machine, 7-cylinder Hardwicke-Etter steel cleaner, Murray VS separator, 72" Murray steel condenser and Murray press and tramper. Will sell all together or any part.—R. B. Strickland & Co., 13-A Hackberry St., Telephones: Day 2-8141, Night: 3-7929, Waco, Texas.

FOR SALE—Six steel V-belt drive 66" Mitchell Standard Units.—Box BM, The Cotton Gin and Oil Mill Press, P. O. Box 7985, Dallas, Texas.

FOR SALE—One Murray Big Reel cleaner drier with separator, double 35" fan, Mitchell burner, 1948 Model, condition good. Priced to sell at \$3,750 loaded on buyer's truck.—M. S. Knowlton, Perthshire, Mississippi.

FOR SALE—Cotton gins: 5-90 Cen-Tennial, electric, steel, big irrigation, Moss. Price: \$110,000, \$30,000 cash. 4-90 Murray, GM diesel, steel, Moss lint cleaner, 50% irrigated, \$115,000, \$25,000 cash. 5-80 Murray, electric, steel, big irrigation, \$105,000, \$30,000 cash will handle. These gins in Lubbock area, looks like bumper crops here.—W. T. Raybon, Box 41, Phone Porter 2-1605, Lubbock, Texas.

FOR SALE—One complete Continental press pump with V sheaves, belts, and 15 h.p. motor.—R. W. Kimbell, Box 456, Earth, Texas.

FOR SALE—One Lummus down-packing press, new piston and pen, \$1,250.—T. T. Clark, P. O. Box 286, Telephone 123, Opp, Alabama.

FOR SALE—4-80 saw Murray gin stands, \$150 each; one saw cylinder complete with bearings, \$75; one heavy steel bound Murray press, \$500; one hydraulic ram and casing complete, \$250; two bucket seed elevators, \$50 each; one separator, \$100; all Murray equipment.—Jonesboro Gin Company, Jonesboro, La.

FOR SALE—One Murray PX press. Gins: Several Continental 80-saw model C air blast gins with 30 fronts and late model 80-saw Murrays with roll dumps and glass fronts. Extracting feeders: Standard and Super Mitchell in 60" and 66" lengths. One 43", 6-cylinder Stacy and one 9-cylinder 50" Hardwicke-Etter V-belt driven steel cleaners. One 48" type C Lummus and one 72" Continental steel separators. Beaumier, Continental and Murray press pumps. Murray and Cameron steel trampers. 10, 20, 40 and 100 h.p. electric motors with starters. ½- and 1½-million BTU heaters. New Phelps fans. Government type tower driers, V-belts and fasteners and hundreds of other excellent items for your machinery or supply needs. For your largest, oldest and most reliable source of used and reconditioned gin machinery, contact us. Qualified graduate engineer to assist you with any of your machine problems, at no obligation. Call us regarding any machinery or complete plants you have for sale or trade.—R. B. Strickland & Co., 13-A Hackberry St., Telephones: Day 2-8141, Night 3-7929, Waco, Texas.

FOR SALE—Long stroke one-story down-packing all-steel Murray press complete with tramper, 14' steel Murray bur machine completely rebuilt all new saw drum cylinder, brush cylinder, and directional cylinders, 52½" Murray separator and vacuum dropper complete, new Hardwicke-Etter short stroke tramper complete with kicker and charge box, Lummus one-story down-packing wood press complete with tramper, Cen-Tennial tramper, EJ tramper, Continental ram and casing, 2-80 saw Murray bolt suction gin stands, 3-80 saw brush Continental Model F gins, 3 FEC Mitchell feeders, 3-80 Mitchell steel conveyor distributor, 6-cylinder horizontal Murray cleaner on "V" drives, 72" Continental separator complete with vacuum, one 1½-M Hardwicke-Etter burner, two 1-M Mitchell burners, three #30 Mitchell vaporizers, three 72" 7-cylinder Murray type incline cleaners complete with vacuum fronts, one 35" Sturdivant fan with multi-blade, one 40" Murray fan. All equipment priced to move.—Wonder State Mfg. Co., Paragould, Arkansas.

FOR SALE—Government type tower driers, automatic gas heaters, blow pipes, and fittings. We are prepared to deliver and install driers, and any gin machinery in conjunction with drying equipment.—Service Gin Co., P. O. Box 21, Phone 4251, Ville Platte, Louisiana.

FOR SALE—One 5-cylinder, 50" Hardwicke-Etter incline cleaner. One Stacy burner, complete thermostat and controls.—Kimbell Gin, Box 456, Earth, Texas.

FOR SALE—One Stacy 10' steel bur extractor; one Stacy 6-cylinder steel incline cleaner; Hardwicke-Etter 6-cylinder air line cleaner; one Continental 10' steel bur machine; one Continental 50", 5-cylinder steel cleaner; 6-80 saw Continental airblast gins; 4-80 saw Continental brush gins; 5-80 saw Murray gins; one set 22' Howe pit type scales with steel stringers; one Murray late type dropper; one Murray steel cleaner, 6-cylinder; one Murray press pump; 2-100 h.p. electric motors. Many other items of good used gin and oil mill machinery. Write us for your requirements.—Trinity Machinery Company, P. O. Box 215, Irving, Texas. Dallas telephone STerling 3925.

Equipment Wanted

WANTED to buy: One 50 h.p. natural gas engine.—T. T. Clark, P. O. Box 286, Telephone 123, Opp, Alabama.

Personnel Ads

WANTED—Good cotton ginner. Must be experienced. Have 4-70 Lummus gin. Must be able to work long hours. Write Rudolf Stasta Gin, El Maton, Texas, or contact at Phone 2321 or 2327, Blessing, Texas.

WANTED—Two reliable ginners for new electric Continental gin, either seasonal or yearly in West Texas. Housing furnished. Write Box LH, c/o The Cotton Gin and Oil Mill Press, P. O. Box 7985, Dallas, Texas.

WANTED—Position as gin manager, bookkeeper or on press, or can do all. Have been manager 15 years. Just want job this season.—Box LZ, The Cotton Gin and Oil Mill Press, P. O. Box 7985, Dallas, Texas.

WANTED—Experienced oil mill superintendent. Have large operation and want man that has thorough knowledge of all phases of the oil mill business. Must be capable of handling labor, strictly sober and reliable.—Box NP, c/o The Cotton Gin and Oil Mill Press, P. O. Box 7985, Dallas, Texas.

WANTED—Night Superintendent. Must be familiar with operation of V. D. Anderson expellers. This is a good job for sober, honest, efficient, loyal operator. References required.—Box CJ, The Cotton Gin and Oil Mill Press, P. O. Box 7985, Dallas, Texas.

Power Units and Miscellaneous

FOR SALE—New and rebuilt Minneapolis-Moline engines, from 35 h.p. to 220 h.p., call us day or night for parts and service.—Fort Worth Machinery Co., 913 E. Berry St., Fort Worth, Texas.

FOR THE LARGEST STOCK of good, clean used gas or diesel engines in Texas, always see Stewart & Stevenson Services first. Contact your nearest branch.

FOR SALE—One V-12 L3000, 400 h.p. Le Roi butane engine; one V-8, 280 h.p. Le Roi engine; two twin six MM, 210 h.p. butane engines; two 6-cylinder MM 240 h.p. butane engines; several 7½, 10, 20 and 30 h.p., 220-440 volt electric motors and starters.—Bill Smith, Box 694, Phones 49626 and 47847, Abilene, Texas.

FOR SALE—Three (3) Clipper cleaners Nos. 502. These are good machines and will sell at a bargain. Contact Northern Star Seed Farms, O'Brien, Texas.

FOR SALE—Model DMM corn sheller in first-class condition; also, baler for shucks, and portable sack elevator.—Vrana Gin, Rt. 4, Schulenburg, Texas.

FOR SALE—Richardson and Fairbanks scales, Niagara vibrating screen, Buckeye engine, Titusville boiler, meal coolers, condensers, Roots-Connerville blowers, heat exchangers, hammer mills, Eureka dust collectors, pumps, valves, electric motors and electrical starting equipment, A-1 condition. Contact Lee Atherton, Archer-Daniels-Midland Co., Investors Bldg., Minneapolis, Minn.

FOR SALE—One set 50' Howe wagon scales with recording beam and weigh-to-graph, \$3,000.—Bill Smith, Box 694, Phones: 4-9626 and 4-7847, Abilene, Texas.

FOR SALE—Power units: 139 h.p. Le Roi D-1000, \$1,350; 671 GMC, 130 h.p., \$2,000; Twin 671 GMC, 260 h.p., \$5,000; RXISV Le Roi, 400 h.p., \$7,500; 75 h.p. RPM Westinghouse electric motor, \$500.—Wonder State Mfg. Co., Paragould, Arkansas.

New Product

NEW LIQUID INSECTICIDE IS MARKETED BY PANOGEN

Drinox, a new liquid insecticide, has been placed on the market by Panogen, Inc. Drinox contains aldrin, made by Shell Chemical Corp., which has proved effective in protecting newly planted seed and young seedlings from attack by wireworms, seed corn maggots, and a variety of other soil-dwelling insects.

On the basis of tests conducted under the supervision of agricultural colleges, Drinox is recommended for treating wheat, oats, barley, rye, cotton, corn, and sorghum.

The manufacturer reports that the product has been thoroughly tested in laboratory, greenhouse and field to determine effectiveness and to observe if seed germination is adversely affected. These tests show that Drinox gives effective protection and is safe to use at the recommended dosages without harming seed germination.

In addition to its effectiveness in protecting seed, Drinox offers the added advantage of being a true solution (not a slurry). It is ready to use without mixing or diluting.

Drinox may be applied in all treaters handling liquids. For further information on Drinox, write Panogen, Inc., Ringwood, Ill.; or The Cotton Gin and Oil Mill Press, P. O. Box 7985, Dallas 26.

• Bale Cover Tests To Be Expanded

TESTS of new bale wrapping materials for cotton will increase during the 1956 harvesting season, the National Cotton Council has announced.

From 10,000 to 12,000 bales will be experimentally wrapped this year, compared with approximately 5,000 bales in 1955.

Fewer gins will be involved this year, but each will handle a larger number of test bales than in previous years.

This change in procedure should give each gin and compress crew a chance to become more familiar with the particular material they are using. Also, it will be much easier to pinpoint the advantages or disadvantages of each material as the bales go through the various operations enroute to the spinning mill, the Council says.

Tests for the 1956 harvesting season will center on two types of materials that gave best results during the past year. They are heavy and medium weight X-crepe paper and burlap laminated with polyethylene film.

Small-scale tests will be run on a number of other materials including woven and non-woven cottons.

Small-scale tests will be run on a number of other materials including woven and non-woven cottons.

■ EDWARD H. BUSH, executive vice-president, Texas Cotton Ginners' Association, wrote an article, "How Ginning Affects Cotton Quality," for The Progressive Farmer August issue.

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Classing and Testing Subject of Bulletin

"Smith-Doxey Classification, Fiber Testing and Problems of the Cotton Trade," is the title of a new Texas Experiment Station publication, Bulletin 832.

Robert L. Hunt, the author, summarizes the information in the publication as follows:

Approximately 150 questionnaires were mailed to members of the Texas Cotton Association and 65 merchants answered the questions in sufficient detail. These firms have an annual business of approximately 4,864,000 bales and represent shippers, f.o.b. merchants, spot brokers and mill buyers.

Of the 65 firms, 53 indicated they purchase some cotton on Smith-Doxey classification and about 38 percent of their total purchases were made on the basis of "green cards" in 1954. Thirty-two firms said the Smith-Doxey classification was satisfactory or at least partially so. Twenty firms were emphatic in saying the service was not satisfactory. Practically all made some criticism concerning Smith-Doxey classification.

Fifty-three firms stated they made some use of fiber testing. All 53 used the Micronaire tests for selling but only 27 reported they purchased cotton on such tests. Approximately 50 percent of the total 4,864,000 bales handled by all 65 firms was sold on the basis of Micronaire tests, but only 27 percent was purchased on this basis.

Thirty-five of the 65 firms sold cotton on fiber strength tests but only 11 firms purchased cotton on such tests. About 11 percent of all sales was made on fiber strength tests and less than one percent was purchased on such tests.

Very little use is made of the fibrograph or maturity tests.

Nearly half of the firms had their own Micronaire but only seven had the Pressley tester. Many firms use commercial laboratories for testing fibers.

Although fiber testing affects the pricing of cotton, it still is too new to give a definite set of discounts and premiums like those given for staple and grade differences. Only a few firms have a clear-cut pricing system based on laboratory tests.

Most of the cotton merchants give 3.5 as the minimum for Micronaire readings based on demands from mills. Most of them said demand requires a Pressley test of 80,000 or more.

The majority think the greater demand is for staple lengths of 15/16 up to 1-3/32.

Problems suggested for study covered a large range. Better varieties, government programs, ginning and improvement in the character of cotton were most often mentioned as needing attention.

Weekly Report Discontinued

New Mexico Extension Service has announced that its weekly cotton grade and statistical report will not be issued during the 1956-57 season. Edwin J. O'Neal, specialist in cotton marketing and utilization, will continue to stress cotton quality in harvesting and ginning in his Cotton Marketing Letter and his personal work with producers, ginners and others in the industry.

New Product

FAIRBANKS, MORSE HAS NEW ELECTRONIC SCALES

A new conception in fast, accurate weighing and weigh batching was recently announced by Fairbanks, Morse & Co. Employing electric load cells, a complete line of weighing instruments has been developed that assure accuracy and faster weighing, plus the convenience of remote weight indication, the firm says.

Two basic types of electronic scales are available. Full Electronic, in which load cells replace the conventional lever systems; and Levetric, in which a conventional lever system is used but with a load cell hooked in tension in the steelyard rod. The Levetric system can be used to convert existing full mechanical scales to electronic weighing and instrumentation.

The new Fairbanks-Morse line also includes two unique electronic weigh batch control systems. The Batchetron is an electronic control system for batch weighing of any type of material that can be handled into the batch hopper by piping, conveyors or belts, or from overhead supply bins where materials are controlled by gates or valves. Through the instrument, each ingredient of a batch is pre-selected and automatically weighed and controlled through the batching operation. The operator merely pre-selects the ingredients according to formula, pre-sets the required amounts on the instrument controls, and pushes the start button.

The Fairbanks-Morse EPC . . . Electronic Program Control . . . is an automatic batch control unit that operates from a pre-punched card. Formulas are punched on a card and the card dropped into a card reader slot on the instru-

ment. The EPC "reads" the card and automatically selects the right ingredients, weighs them in the weigh batch hopper, and discharges them to following process equipment.

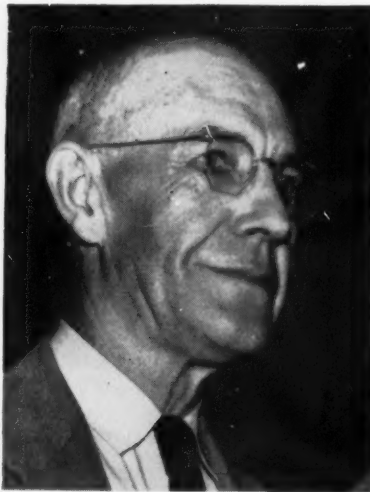
The new Fairbanks-Morse line has been extensively tested in actual field installations. More than seven years of research, development and testing were involved before the line was judged ready for announcement. Actual applications have involved ready-mix concrete plants, powder plants, truck weighing stations, industrial plants, as well as a large number of specialized applications. Complete literature is available by writing Fairbanks, Morse & Co., 600 S. Michigan, Chicago 5; or The Cotton Gin and Oil Mill Press, P. O. Box 7985, Dallas 26.

Gin Purchases Listed on Texas High Plains

Recent gin trades on the High Plains of Texas, as reported by Lubbock Cotton Exchange, include the following:

Purchase by Kirk Dean of one-half interest in the Crater and Goree gin at Edmonson; purchase by W. M. Wright of Kirk Dean's interest in Broadview Gin near Lubbock; movement of a gin by Travis Hair from Lockney to four miles south of Tulia; sale of Jones and Martin gin south of Levelland to A. L. Newsum; purchase of Lakeview Gin in Floyd County by Lee Massey; sale of Thomas Bros. Gin at Grassland to a newly organized co-op; and installation of a third unit by Petersburg Co-op Gin.

■ CHARLES W. FITZGIBBON, a former county agent, is now superintendent of the Cotton Research Farm in the Arizona Salt River Valley.



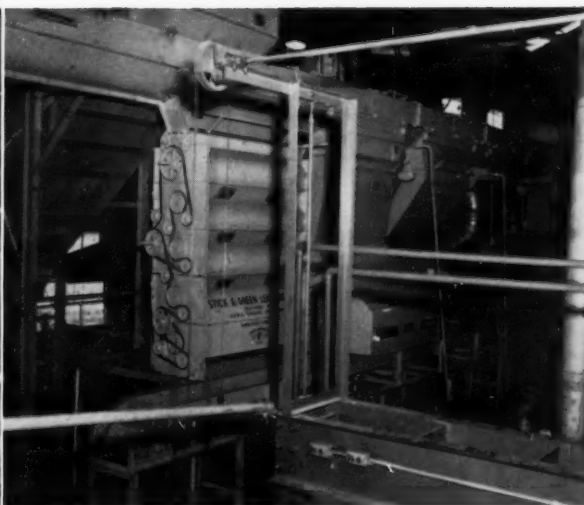
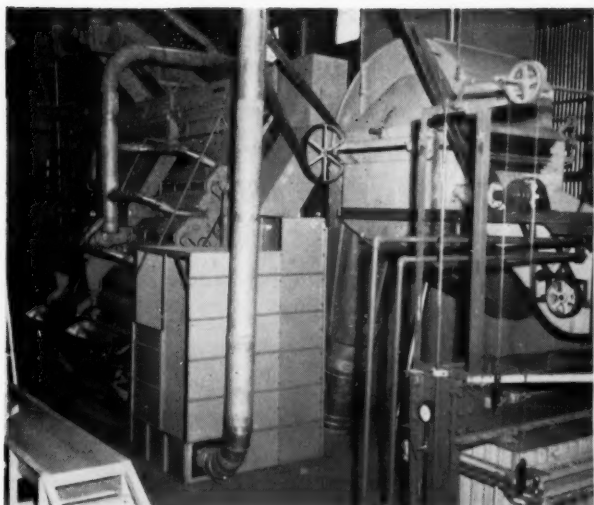
R. FLAKE SHAW



WM. RHEA BLAKE

Two Leaders on Mechanization Program

TWO LEADERS in the National Cotton Council who will have prominent roles in the tenth annual Beltwide Cotton Mechanization Conference, Aug. 22-24, at the Biltmore Hotel in Atlanta are shown here. Wm. Rhea Blake, Council executive vice-president, will speak on "How Big Is Cotton's Future." R. Flake Shaw, chairman of the mechanization steering committee and executive vice-president of North Carolina Farm Bureau Federation, is general chairman for the Conference. Details of the program for the meeting will be published in the next issue of The Cotton Gin and Oil Mill Press, which also will publish addresses, panel discussions and pictures of the event in a complete report after the Conference is held.



TWO INTERIOR VIEWS at the new Southeastern Cotton Ginning Research Laboratory are shown above. The picture on the left shows the gin side of the Laboratory, with the 11-cylinder inclined cleaner, conveyor distributor, two different types of unit extractor-feeders, two 90-saw airblast gin stands, condenser, overflow pen and hot air piping to the feeders. On the right, the photograph shows the seven-cylinder inclined cleaner, government-design stick and green leaf remover, a unit cleaner and a master bur extractor. The Laboratory has, also, a 24-shelf tower drier, two 12-shelf tower driers, and a bulk seed cotton feed control mechanism. Natural gas is used for heating with automatic control of temperature of air entering the drying systems. Electric power is used.

In addition to gin machinery, there are a well-equipped maintenance shop, office facilities and controlled laboratories for sample analyses.

The lower picture shows James A. Luscombe, engineer in charge of the Laboratory, which will be formally dedicated on Aug. 14 at a Cotton Day at Clemson, S.C.

Laboratory, is in charge of the new Southeastern Laboratory.

The staff includes Warren E. Garner, agricultural engineer; Joseph B. Cocke, agricultural engineer; Seymour A. Porter, general mechanic; and Mary Verner Campbell, stenographer and clerk.

• USDA Will Dedicate Ginning Laboratory

FIVE HUNDRED representatives of the cotton industry and research institution are expected at the formal dedication of USDA's Southeastern Cotton Ginning Research Laboratory at Clemson College, S. C., on Aug. 14.

Assistant Secretary of Agriculture Earl S. Butz will be the principal speaker.

The dedication will be a major feature of a special Cotton Day during Farm and Home Week at Clemson College. Cotton production practices will be discussed by representatives of morning program presented at the Laboratory, which is located on Cherry Road.

Secretary Butz will speak at noon in Tillman Hall on the Clemson campus.

The dedication ceremonies will start at 2 p.m. at the Laboratory. They will include an invocation, flag raising and talks by representatives of Experiment Stations, Extension Services, the Cotton and Cottonseed Advisory Committee, National Cotton Council, American Cotton Manufacturers' Institute and National Cotton Ginners' Association.

James A. Luscombe, who formerly was in Oklahoma at the Chickasha

Mill Warns Tar-Spotted Cotton Not Wanted

Cotton manufacturers now are exerting direct pressure on producers in some areas to eliminate tar spots in cotton.

Jasper Jernigan, Extension cotton specialist, says one North Alabama county has reported an ultimatum from the manufacturer that buys most of the cotton grown in that area. The mill stated that it had paid claims on goods rejected because of tar spots, that some cotton coming from the county in question had been found to be contaminated, and that unless the buyer could be assured of tar-free cotton from that county in the future, it would be forced to find other sources for its raw material.

"Growers in other parts of the state can expect to face the same issue if they continue to send tar-spotted cotton through the gin," Jernigan commented after telling of the mill's demand. "Cotton improvement association members who have built up reputations for uniform, good-quality cotton can't afford to lose their markets because they use the wrong kind of pick sacks."

The specialist urged every Alabama grower to use plastic-dot, plastic-coated, or plain duck sacks.

Equalization Payments To Aid Cotton Products

USDA has announced that assistance in the export of U. S. cotton products to be shipped on and after Aug. 1 will be made available through cash equalization payments from CCC to eligible exporters.

On May 21, the Department announced that the benefits of the export program for raw cotton soon would be extended to cover exports of cotton textiles, cotton yarns, and spinnable cotton waste manufactured from American upland cotton. Under the raw cotton export program, sales of cotton from CCC stocks for export on or after Aug. 1 are being made on a bid basis at competitive prices, says USDA.

Extension of the benefits of the export program to cotton products is designed to protect the competitive position of the domestic cotton industry in relation to sales of cotton products manufactured abroad from American cotton purchased at export prices lower than domestic prices. Equalization payments will be based on the raw cotton content of products exported.

USDA also announced that CSS will establish a special office in New York City to handle program administration. This office will receive registration of export sales, take care of necessary inspections, make payments, and handle other administrative details of the new program.

The special New York office, which will be designated as the CSS Cotton Products Export Office, located at 290 Broadway, will be staffed and in operation by Aug. 1.

IN 50 YEARS OF GINNING:

From Oxen To Planes

OXEN AND AIRPLANES have provided transportation for C. S. Lambert. He has served Uncle Sam in two wars. And he has ginned almost a quarter-million bales of cotton under conditions as varied as those in Georgia, West Texas and New Mexico.

Lambert is only 60 years old (you wouldn't believe he is that old just to look at him); but he's been associated with cotton gins for more than 50 of those years. Energetic and an interesting talker, he's now at Loving, N. M., managing Carlsbad Growers' Cooperative Association.

Mrs. Lambert, a former school teacher, is just as interesting as her husband. She's largely responsible for the following account of his recollections of cotton ginning, which she prevailed upon him to write for The Press after a representative visited with Mr. and Mrs. Lambert at the New Mexico Cotton Ginners' Association 1956 convention.

• **Ginning in Georgia** — "In 1902-03," Lambert begins, "Dad ran a gin with an old overshot waterwheel for power. It had two 60-saw gin stands, with 10-inch saws. Cotton was carried to the gin stands in baskets, and the cottonseed was poured underneath the floor. Seed had no commercial value, and anyone who wanted it could haul it off. "The lint was picked up back of the gin stands and carried by the armful to the single pressbox. There men

tramped it down into the box. Four men could gin about two bales per day. This was a plantation gin, which ginned about 60 or 70 bales a year." (Lambert's participation in ginning in 1902-03 was somewhat limited; he was large enough only to carry lunch to the men at the gin.)

In 1904-05, the elder Lambert ran a 2-70 gin, with suction and a revolving press, at a town named Texas in Herd County, Ga. This gin could handle six or eight bales a day. In 1909, the Lamberts bought half interest in a 2-70 gin at Simpson, Ga. Cottonseed was burned in the boiler. The younger Lambert drove a yoke of oxen seven miles to take 5,000 pounds of cottonseed to a small oil mill at Franklin, Ga., and traded the seed for 700 pounds of cottonseed meal and a load of hulls. He had to pay the mill \$2 to complete the trade.

When this gin burned on Nov. 10, 1910, the fire was a disaster for the Lamberts.

"We were ginning for the toll, about one-tenth of the seed cotton, I think," Lambert recalls. "We had about four or five bales of toll cotton stored in stalls which burned. This left us flat broke. No insurance, of course."

• **A "Party Ticket" to Texas**—The Lamberts decided to come to Texas, where relatives of the mother of the family had been living for several years.

"Our family, along with another family, made up what was called a 'party ticket'. Railroads would permit a party of 10 or more grownups to go for half fare, while children under 12 were carried free. There were 11 adults and five children in our party. The party ticket also was known as a Cotton Belt Excursion. Each paid ticket was allowed 50 pounds of baggage, in addition to what the person could carry into the coach with him."

The Lambert party managed to carry on the train enough food to last them until they got well into Arkansas, several days later. The neighbors cooked sausage, ham, chicken and other food to go on the trip; and the party ate two meals a day, spreading the food out in the coach and returning thanks before each meal.

Boarding the train at Bremen, Ga., on Dec. 11, 1910, the party spent five days enroute.

Soon after they crossed the line into Texas, the children went wild with excitement at the sight of the first cowboy, chasing a steer along the right-of-way.

"My eyes nearly bugged out of my

C. S. Lambert remembers
when cottonseed was dumped
under the gin floor as worthless,
but he's young enough to have
1,500 hours of flying time
as a technician for Uncle Sam
during World War II.

head, and I felt that I was really in the Wild West," Lambert remembers.

Stopping at Marlin, Texas, the Lamberts had a total of \$40 cash, no furniture, "no nothing". Lambert's grandfather had rented them a farm near Rosebud, so they farmed as sharecroppers in 1910-11. The older boys did the farming, while the father worked as a carpenter in Rosebud.

• **Back to Ginning** — That fall, Lambert continues, "Dad and I worked at night at the American Round Bale Gin, which bought seed cotton, stored it and ginned continuously during the rush season. This was a modern 4-70 gin, round bale only. In 1912-13 we worked for Gray Brothers at Rosebud, ginning 3,000 to 4,000 bales each year."

December of 1913 found the family pushing westward again. They farmed near Rotan, Texas, where they had bought a farm; and the father and son worked at the gin of Price brothers on the bumper crops of 1914 and 1915. The gin ran day and night all fall and it took four or five days to get a wagon-load ginned.

Crops weren't so good in 1916, and even worse in the drouth years of 1917 and 1918, and the Lamberts did no ginning. Young Lambert entered military service in 1918, during World War I, and did not come back to Rotan until January of 1919.

School Teacher Bessie Huckleberry became Mrs. C. S. Lambert soon after he



came back, and has shared his experiences in ginning, military service and farming since.

Lambert was associated with the cotton industry most of the time from the First to the Second World War. He recalls the gins at which he worked and the volume of cotton handled as follows:

1919—Farmers' Gin, Rotan, about 9,000 bales.

1920—didn't gin.

1921-25—Worked for William-Miller Gin Co., Rotan, ginning about 10,000 bales.

1927-37—Became manager of William-Miller Gin at Westbrook. He ginned about 24,000 bales of cotton in 11 seasons at Westbrook.

1938—Lambert was road superintendent for Rule-Jayton Cotton Oil Co., handling 23 gins, which ginned only 25,000 bales in that light-crop year.

1939-42—Lambert returned to Westbrook, managing Westbrook Co-op Gin, which handled about 10,000 bales.

The outbreak of World War II found Lambert back working for Uncle Sam. He entered the Army Air Corps and, as a plane technician, got in 1,500 hours of flying time. Mrs. Lambert followed him about the country while he was in the service, and they enjoyed the experience as much as anyone could enjoy the tribulations of wartime living conditions.

• **Westward Again** — After one season at Westbrook, in 1946 the Lamberts went to Loving, N. M., where he was associated with Pecos Valley Cotton Oil Co. for four seasons.

The season of 1951 found Lambert at Dell City, just about as far west as you

can get in Texas, as manager of gins for Western Cottonoil Co. He estimates that he ginned about 80,000 bales of cotton during the five seasons that he remained at Dell City.

Now the Lamberts are back at Loving, N. M., where they own their home and have many friends. He looks forward to the coming cotton season, and expects to keep up with the developments that come in ginning, just as he has since the days when he used oxen to haul cotton.

• Outlook Shows Need For Supima Cotton

TIGHTENING world supplies of extra long staple cotton due to heavy purchases of Egyptian cotton by Iron Curtain countries afford new proof of the necessity for a stable domestic source of supply, the Supima Association of America declares.

Mitchell Landers, El Paso, executive vice-president of the organization, said indications are that this year's American crop will yield 45,000 to 50,000 bales.

"While weather conditions will be the determining factor, the crop is off to an excellent start and the outlook for a production of as many as 50,000 bales currently seems good," Landers said. Plantings this year totalled 43,800 acres in Texas, New Mexico, Arizona, and California, a slight increase over 1955, when adverse weather cut yields.

Although sales of extra long staple cotton held in Commodity Credit Corporation stocks have been heavy in recent months, Landers said that CCC still

holds about 55,000 bales. Virtually all of the 1955 crop has already moved into commercial channels.

Stating that the Supima Association had last year made futile efforts to gain increased acreage allotments, the official said that his organization is getting under way a concerted campaign for greater allotments for the 1957 planting season.

"As long as our American mills are forced to rely on foreign suppliers for a substantial portion of their extra long staple consumption, we are likely to be faced with recurring situations of extreme fluctuation of price and supply."

The quality of Supima, as American extra staple is named, has been proved to be fully equal, and in many instances superior, to that of foreign growths, he said. Performance of Supima in woven goods end uses was termed "outstanding."

"Already the results of the Supima Association's promotion and public relations program, initiated little more than a year ago, are making themselves felt," Landers added. "In every instance, Supima has been introduced to the consuming public at the prestige level. These introductions coupled with the high quality of both the fiber and consumer products made from it already have gone a long way toward exploding the myth of the 'superiority' of imports."

■ **DR. JAMES A. BRALLEY** has been named director of research for the A. E. Staley Mfg. Co., Decatur, Ill.

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SCENES LIKE THIS are becoming more common throughout the Southeast, Midsouth, Southwest and Far West as more farmers turn to irrigation to supplement rainfall.

GEORGIA IRRIGATION GUIDE

Even though rainfall averages 50 inches a year, many farmers are interested in a supplemental water supply and this guide will help conservation irrigation.

THERE IS an axiom that "self-preservation is the first law of nature." Obeying this natural law, man is constantly providing for his immediate needs while planning and working to insure that his future needs will be met. Through the ages there have been periods of drouth, followed by periods of famine. The governments of Biblical times sought to prepare for prophesied famines by storing grain and other foods for use when none could be produced.

People who practice a reasonable degree of thrift recognize the wisdom of "laying up something for a rainy day." The same characteristic of thrift, in reverse, is behind the planning of conservation irrigation programs. Farmers are "storing up" water for a rain-less day.

When nothing is done to prevent it, much rainwater runs off the land into branches and streams, and finally flows to the ocean. It is thus lost to irrigation and other uses. Decreasing rainfall in recent years has made the farmer water conscious. This is evidenced by the tremendous increase in the number of deep wells drilled, ponds built, and

pipng systems bought for transporting water from wells, ponds and streams to crop-producing fields. Farmers today are viewing the possibilities of famine following drouth, and are attempting to prevent it by applying good soil and water conservation programs. They are assisted by local, state and federal agencies.

Rainfall records in Georgia for 31 years from 1918-1949 show that Georgia has natural rainfall of approximately 50 inches annually. However, rainfall is not equally distributed, and the loss by runoff is high. Approximately 15 to 20 inches of runoff occurs annually over the southern half of the state, and the runoff reaches 30 to 40 inches in the northern portions.

• **Irrigation Interest New** — Only in recent years has serious thought been given to the feasibility of irrigation. In 1951 and 1952 the average annual rainfall was 10 percent below normal, in

1953 10 percent above, and in 1954 38 percent below normal. Periods of drouth occur frequently and are long and severe enough at times to seriously reduce yields.

In hilly terrain and shallow soils, sprinkler-type irrigation is recommended. However, in some areas of the state, near large streams where the topography is almost flat, there are possibilities of using furrow or flood-type irrigation. The water for irrigation is being supplied by farm ponds and streams in the northern part of the state, and by ponds, wells and streams in the southern part of the state.

• **Two Guides Prepared** — In order to solve some of the basic problems encountered in designing irrigation systems, Conservation Irrigation Guides were developed. Due to varied soil types and crops grown within the state, two guides have been prepared—one for South Georgia, including Upper, Middle and Lower Coastal Plains, and the other one for North Georgia, including Piedmont, Limestone Valley, and Blue Ridge Mountains.

The Conservation Irrigation Guides

By L. D. WORLEY

State Conservation Engineer, SCS

Table I—Soils Information for One Important Cotton Soil:

Column 1	Column 2	Column 3		Column 4	Column 5
National Code	Profile Description	Intake rate of Profile (In./Hr.)	Average Soil Depth (Feet)	Available Moisture-holding Capacity (In. in Ft. Increments)	
		Clean Tilled	With Cover		
2gL54	Tifton Sandy Loam. Deep, well drained topsoil 6 to 12 in. thick and with moderately rapid permeability in the first zone and moderate in the second zone.	0.5	0.7	3.0	1.4 1.2 1.1

Column 1, National Code—A code number used by the soil surveyor to identify some of the physical characteristics of a particular soil profile found in the field.

Column 2, Profile Description—A narrative description and common name for the particular soil profile.

Column 3, Intake Rate of Profile—The maximum rate in inches per hour at which water will enter into and penetrate each soil profile under the cover conditions indicated.

Column 4, Average Soil Depth—The average depth of the soil profile through which plant roots can penetrate readily in search of plant food and moisture.

Column 5, Available Moisture-holding Capacity—The capacity of the soil profile to store or hold water available for plant use. It represents the range of soil moisture between wilting point and field capacity.

Table II—Irrigation Designed Recommendations for Cotton on Five Soil Types.

	Column 7	Column 8	Column 9	Column 10	Column 11	Column 12
	Depth to Wet Soil (Feet)	Soil Moisture Replaced at each Irrigation (Inches)	Design Moisture Withdrawal Rate (In./Day)	Irrigation Frequency (Days)	Application Rate (In./Hr.)	Maximum Application Amount (Inches)
Greenville and Magnolia						
Sandy loam 1S43	2.0	1.2	.21	6	0.50	1.7
Orangeburg and Red Bay						
Sandy loam 1L54	2.5	1.2	.21	6	0.50	1.7
Tifton						
Sandy loam 2gL54	2.0	1.3	.21	6	0.40	1.8

Column 7, Depth to Wet Soil—The depth of the soil profile in which the vast majority of the plant roots are contained and the zone in which the moisture level is to be controlled for optimum plant growth.

Column 8, Soil Moisture To Be Replaced at Each Irrigation—The amount of moisture, expressed in inches of water, which must be replaced into the soil profile at each irrigation in order to bring the moisture level from a pre-determined lower limit up to field capacity. This lower limit has been taken as 50 percent of available moisture for row crops.

Column 9, Design Moisture Withdrawal Rate—The design maximum rate of transpiration by the crop plus evaporation from the soil surface.

Column 10, Irrigation Frequency—The maximum number of days the designer can allow for the completion of one irrigation of the entire design area.

Column 11, Application Rate—The maximum recommended rate of application on the particular soil profile for the crops to be irrigated.

Column 12, Maximum Application Amount—The maximum gross amount of water to be applied or pumped through the system at each irrigation is based on a sprinkler system efficiency of 70 percent.

for the state of Georgia are semi-technical publications prepared by the agricultural agencies within the state. The Soil Conservation Service took the leadership in developing plans for the preparation of the guides. These plans were discussed with technical personnel from the University of Georgia Agricultural Engineering School, the Extension Service, the Agricultural Research Service, and the Soil Conservation Service Program Services Staff.

Using available research and other data, the guides were prepared at two two-day conferences—one held at Abraham-Baldwin Agricultural College in Tifton, and the other at Athens. Participating in the developments of the guides were soil scientists, agronomists, and engineers from the Soil Conservation Service; engineers from the Extension Service; and engineers, agronomists, and soil scientists from the Agricultural Research Service.

The guides present some of the basic principles involved in designing sprinkler-type irrigation systems, and include detailed recommendations for irrigating the principal crops grown in Georgia. Their scope is limited to sprinkler-type irrigation. They attempt to answer three questions basic to the design of adequate irrigation systems: (1) How much water should irrigation systems be designed to apply? (2) What is the maximum time in days that can be allowed between each irrigation?, and (3) At what rate can water be safely applied to the soils being irrigated?

Revisions will be made from time to time as research progresses and additional experience and knowledge are gained by the agricultural agencies and commercial irrigation interests within the state. The guides contain the best information on sprinkler irrigation available at this time for Georgia.

Listed here are two condensed tables taken from the South Georgia Guide relating to cotton irrigation. Table I lists the soil type and other soils information for one important cotton soil in South Georgia. Table II lists the irrigation design recommendations for cotton for some adapted soils in the southern part of the state. An explanation of each column follows each table.

Due to the extremely dry weather conditions for the past few years, the interest in supplemental irrigation has greatly increased. The information contained in the Conservation Irrigation Guides is very helpful to technicians in planning irrigation systems for farmers throughout the state. The guides are being used by agricultural workers, private engineers, and equipment dealers who are interested in irrigation designs.

■ Dr. MARION S. OFFUTT and GLENN W. HARDY have joined the University of Arkansas agronomy staff, FOREST G. RORIE has been named to the plant pathology department and ANTONIO JIMENEZ has been added to the animal industry and veterinary science department.

Using Aeration

(Continued from Page 9)

set to pull air operated a total of 632 hours compared to 654 hours for the other fan.

Although effective cooling was obtained with the low air flow rates, it should be emphasized that such small amounts of air are not sufficient for drying high-moisture cottonseed, but are useful only in maintaining quality of low-moisture seed (below 12 percent moisture).

Since a greater number of fan hours are required to cool with low air flow rates, it is necessary to take full advantage of all favorable cooling weather. This can be accomplished most effectively by providing an aeration system that will cool all of the seed at one time. Separate fans can be used for each tank, as was done in these tests; or one fan can be used to supply air to two or more tanks at the same time. The system used probably will depend largely upon comparative costs of the different types of installations.

• Cooling Can Cause Condensation —

Pushing air through seed seemed to be about as effective in reducing seed temperatures as pulling air. There was no indication of condensation in any of the bins. However, in some areas, there may be problems from condensation in the upper layers of seed or on the bin roof when air is pushed upward. This may happen in any area if seed is not uniformly cooled before cool weather starts; but it is more likely to occur in cold climates than in warm climates. Pulling air downward avoids condensation since the warm humid air leaving the seed does not come in contact with the cool surface area or the bin roof. It also gives an opportunity to smell the air coming out of the bin to detect any "off" odor which may have developed.

During warm weather, it may be advantageous to push air upward through seed while bins are being filled. This will prevent warm air from the top of the bin and upper layers of seed from being pulled through seed which has already been cooled.

During the test period, there was no increase in free fatty acid content in any of the bins. At the start of storage, average germination of the seed in the two bins aerated with the small fans was 75 and 79 percent, respectively. At the end of storage, germination was 85 and 83 percent, respectively. Germination of seed in the bin aerated periodically with the 34-inch portable fan was 84 percent at the start of storage compared to 82 percent at the end of storage.

• Results Are Compared — More research needed before definite recommendations can be made, but one year's results indicate that an aeration system that will provide small amounts of air to cool all of the seed at one time may have the following advantages over a portable system used to cool seed alternately in several bins: (1) permits full use of all favorable cooling weather, thus eliminating the risk of inadequate cooling of some of the seed; (2) reduces the labor involved in handling and operating equipment; and (3) provides greater flexibility in use and operation of equipment.



Official U.S. Navy Photo

CRANE-EQUIPPED CATERPILLAR D8 is shown at work in the Antarctic towing assembled aircraft landing aid equipment to the sea ice airstrip.

Not Like a Cotton Field

"Operation Deepfreeze"

■ COOL READING for ginner and crushers in summertime is the story of how the Navy uses Caterpillar equipment in Antarctic.

CONDITIONS quite different from a Cotton Belt field in August prevail in the Antarctic, but the same types of equipment are being used in both places. For example, crane-equipped Caterpillar tractors will haul nearly 500 pounds of equipment 600 miles to establish a station in Marie Byrd Land, and other Caterpillar equipment has earned the Navy's praise for work already done in "Operation Deepfreeze."

Antarctic activities described in a recent release from Caterpillar Tractor Co. make cooling reading for crushers and ginner's facing a southern summer. Some of the work near the South Pole is described as follows:

Special equipment was used by the Navy's supporting arm of the Antarctic's International Geophysical Year, and a second order for about \$1 million worth of Caterpillar equipment will leave the U.S. in October for Operation Deepfreeze II.

Additional machines for use by the special Seabee mobile construction battalion include 26 Cat LGP No. 955 Traxcavators equipped with either fork lifts, bulldozers blades or buckets; seven Cat LGP D8 Tractors, two Twin Arc Welders and 19 30 KW Cat Electric Sets. The D8s are of the same design as those already there. Some of the LGP 955s will have more than one attachment to permit greater versatility.

The Seabees already have available eight Cat LGP D8 Tractors, nine Cat LGP D2 Tractors, three LGP D4 Tractors plus sixteen Cat Electric Sets which are supplying all the electric power for the huge five-station operation which the U.S. will have at the end of the next year.

The Seabees found during Deepfreeze I that the D4 permitted hauling sufficiently large loads to make them prac-

tical. Two additional LGP D8s are replacement for machines lost. The Arc Welders will be used in the construction of metal fuel storage tanks, and for other welding purposes. The only other tracked vehicles on Deepfreeze are personnel carriers.

Virtually all supplies were hauled from shipside to basesite at Little America and Hut Point (now Williams Air Operations Facility) in McMurdo Sound by the LGP crawlers and sled. The tractors were constantly busy maintaining the trail, leveling sites for the buildings, pulling the nine-ton snow-compacting rollers to construct airstrips and building sites. Hyster cranes on the back of some of the tractors were used to offload heavy packages such as the 5,000 to 9,000-pound Cat Electric Sets and to set in place the 3,000-pound sheet steel sections for fuel storage tanks. The D4s expedited offloading of sleds and utility work in the supply yard at basesite.

• **Many Hazards** — There were many hazards. Two men were lost, one in an ice crack in the McMurdo Sound area, the other while caching fuel for the tractor-train ship scheduled for next October to Byrd Station. The hazards were ice cracks on the bay ice and crevasses on the shelf ice farther inland.

These cracks and crevasses had been spotted by men in planes, personnel carriers, and on skis and, if not too deep, a tractor was brought up to fill the gap with snow. Otherwise, a Bailey-type bridge was employed.

One of the hazards was the comparatively thin ice at shipside. The D8s, which weigh 70,000 pounds, made offloading particularly precarious. The bay ice might get as thick as six feet, but just as a precaution, the D8s were fired up before leaving the deck of the ship

and the operator climbed aboard the machine before the boom rigging was slack and drove the machine away as soon as the rigging was cast off.

In all, about 500 trips were made. The tractors hauled about 3,700 long tons of supplies and equipment an average of 4½ miles at McMurdo and about 4,600 long tons at Little America. The latter figure included drum fuel.

Initially, about half the supplies were unloaded a comfortable 1½ miles from the ship at Little America. Then, when the big thaw came shortly after New Year's, Seabees spent a hectic 60 hours hauling those supplies the remainder of the five-mile total distance to basesite of Little America V.

Trail maintenance work was a constant task proving the desirability of having bulldozer blades on the LGP D8s. One tractor was employed at this work almost full time.

Site work was relatively simple. A one-foot cut of the powder-dry snow usually was adequate and most of the buildings were 20x40 prefabs. The fuel tanks were 74 feet in diameter.

Deepfreeze II will construct Byrd Station at approximately Latitude 80, Longitude 120 degrees, approximately 600 miles from Little America. This will involve the 10- tractor train, each hauling 100,000 pound payloads, for which fuel was cached during the past few months.

Another station will be at geographic South Pole and 500 tons of supplies will be ferried 800 miles from Williams Air Operations Facility for this operation by Navy and 18th Air Force airlift. These supplies will be air-dropped.

Three new stations scheduled for Deepfreeze II include Weddell Sea and Knox Coast, to be slightly larger than Byrd Station, and Cape Adare, to be smaller than Pole Station. All stations will be used by scientists in the Antarctic winter of 1957-58.



Gin Specialist Resigns

HOWARD W. ZUCH, College Station, has resigned as Texas Extension cotton ginning specialist, effective July 15. Zuch has re-entered Texas A. & M. College to complete his requirements for a M.S. degree in electrical engineering, which he expects to obtain in 1958. He asked The Press to express his appreciation to members of the Texas cotton industry for their cooperation with him during his work with the Extension Service.



RESEARCH WORKERS look startled at what they find as they break eggs during a conference on cottonseed meal and egg yolk discoloration held recently at Phoenix and reported in the accompanying article. Seated, left to right, are: Dr. R. J. Evans, Michigan State University; Dr. C. R. Grau, University of California; James Masson and Dr. A. R. Kemmerer, University of Arizona. Standing, are: Richard Lowe, Southwest Poultry Experiment Station; Dr. H. L. Wilcke, chairman, NCPA Research Committee; and Dr. A. M. Altschul, Southern Regional Research Laboratory.

• Conference on Meal Held at Phoenix

PLANS to intensify and coordinate research to prevent egg discoloration when cottonseed meal is fed to laying hens were developed at a conference of research workers and National Cottonseed Products Association officials in Phoenix, Ariz., on July 10.

The NCPA Research Committee and Educational Service called the conference to evolve a better understanding of why gossypol causes egg yolks to become dark and a factor in cottonseed oil produces a pink discoloration in egg whites when the eggs are stored.

The California Agricultural Experiment Station is studying the cause of dark yolk colorations which occur through the chemical reaction of gossypol and other elements contained in the egg yolk. The Arizona and Michigan State Agricultural Experiment Stations are investigating the occurrence of pink egg whites while the Southwest Poultry Experiment Station is studying both discolorations. Research at the Southern Regional Research Laboratory seeks to develop processing techniques which will eliminate from cottonseed meal the causative discoloration factors. All phases of the studies are being conducted in cooperation with the National Cottonseed Products Association.

Educational Director A. L. Ward pointed out that solution of these egg quality problems will open up extensive markets for cottonseed meal in millions of tons of egg-laying feeds as well as increase usage of cottonseed meal in other manufactured poultry feeds. Research Chairman H. L. Wilcke reported, "We are highly impressed with what these research workers are accomplishing. Their progress and the nature of their future plans give us confidence that these most difficult problems will be solved much earlier than we have expected."

In addition to Wilcke and Ward, the

meeting was attended by Dr. A. R. Kemmerer and James Masson, University of Arizona; Dr. C. R. Grau, University of California; Dr. R. J. Evans, Michigan State University; Burt W. Heywang and Richard Lowe, Southwest Poultry Experiment Station; Dr. A. M. Altschul, Southern Regional Research Laboratory; President H. S. Baker, NCPA; and Garlon Harper and Kenneth Lewis, NCPA Educational Service.

■ CARL COX, Dallas, now is manager of the quality control department of W. D. Felder Co., cotton firm.

6.2 Billion Pounds of Oil Can Be Stored in U.S.

Storage facilities for fats and oils in the U. S. are adequate even for years of heavy production, USDA says in publishing results of a survey made in 1951. Tank storage capacity was 6.2 billion pounds, the survey of 3,100 firms five years ago indicated.

At no time did stocks on hand require all the tank capacity available. Mill storage capacities for oilseeds and their products were adequate and generally well distributed among the various oilseeds. Neither adequacy nor character of the storage facilities is believed to have changed significantly since the survey was made. More than one-half of this tank storage capacity was in the vicinity of five ocean ports and one lake port, USDA says.

While cottonseed is usually stored at oil mills, only about a fourth of the soybeans are stored at the mills, another fourth at farms, and the remainder at country and terminal elevators and with dealers at transportation centers. Flaxseed is stored at mills or in commercial storage facilities. Oil stock peanuts, sorted from edible peanuts at shelling plants, require little storage.

A copy of Marketing Research Report No 122, "Tank Storage of Fats and Oils and Mill Storage of Oilseeds and Their Products," is available from the Office of Information, USDA, Washington 25

CCC To Purchase Cotton Certificates Aug. 1

CCC will purchase at maturity on Aug. 1 all outstanding 1955 cotton program certificates of interest issued to cotton lending agencies by custodians (Federal Reserve Banks) at Atlanta, Dallas, Los Angeles and Oklahoma City, and the New Orleans CSS commodity office.

Producers will have until Dec. 31 to redeem their loans, says USDA.



AMERICA'S LARGEST PRODUCERS, REFINERS AND USERS OF COTTONSEED OIL

Day after day, a constant stream of vegetable oils comes from producers throughout the South to be processed at southern Procter & Gamble plants. Tremendous quantities of these oils go into the making of Crisco, Primex, Sweetex and Flakewhite shortenings, and Puritan Oil.

The Processing done at these plants benefits countless people throughout the South. The users of our products made from south-produced oils...the many southern firms that supply P&G with services and materials...the P&G workers themselves. In addition, the money P&G spends on payrolls and taxes benefits every community where its plants are located.

So, out of the South—to all America—go Procter & Gamble products which are helping to build a better, more prosperous future for all.

News for Ginners

From Their

National Association

■ **DON'T GET PANICKY!** That's the best advice on the bale tie situation. National Cotton Ginners' Association is working closely with the National Cotton Council, state ginners' associations, government officials and others in exploring every possibility of getting adequate supplies of ties for the 1956 crop. Executive Secretary Clyde R. Allen attended the recent conference at Greenville, S. C., at which the situation was thoroughly studied, and emphasizes to ginners the importance of avoiding rushing into a black market situation.

■ **TESTING BALE COVERING** is another field in which the National Association is working with manufacturers, the National Cotton Council and others. More bales will be tested this year at about the same number of gins as last year, so that handlers may have a larger volume per gin or compress with which to work.

■ **RAILROADS ARE HELPING** the cotton industry in its efforts to reduce contamination and fires when cotton is

in transit. Following the recent Memphis conference of cotton industry and railroad representatives, the Association of American Railroads sent members a letter on the matter.

"To minimize cotton contamination and cotton-in-transit fires," the letter said in part, "cars furnished for cotton loading should be:

"1. Clean-free of protruding nails, anchor plates and metal straps.

"2. Weathertight, without holes or leaks in floor, roof or sides and have tight-fitting doors.

"3. Of sound floor construction so that lift trucks may be safely used.

"4. Free of tar, asphalt, oil or grease.

"5. Free of other contaminating substances, such as lamp black, indelibles, sand, lime, fertilizer, and other powdery substances."

Individual ginners will aid this program by discussing the importance of getting clean, satisfactory cars for any cotton shipments that they make by rail. And, of course, each gin operator needs to check his own plant to reduce danger of contamination and fires before the cotton goes into the rail car.

■ **DONALD L. BRANYON** has returned to his former position as agronomist with Georgia Extension Service after 18 months in Israeli.

Cottonseed Meal Research

(Continued from Page 14)

cessing have been successfully used for manufacturing these meals. In one method a chemical treatment is used to inactivate the gossypol without allowing it to combine with the protein. The other method is the prepress solvent system where, under normal operating conditions, considerable gossypol goes into the oil to be removed later during refining. This characteristic of the process makes it much easier to produce a meal with high nitrogen solubility.

The tonnage of cottonseed meal which is now going into the new markets is quite substantial. One estimate runs as high as 250,000 tons per year.

• **What About the Future?** — Today interest is high in the development of new and different methods for the production of superior quality meals. The answer for the future is not just one good method but rather quite a number of entirely different methods. In the past, fundamental studies on the complicated chemical changes which take place in cottonseed during processing have been important factors in the progress which has been made. Additional information of this type is needed, particularly in connection with the reactions of cottonseed protein with various constituents of the seed.

Protein supplements for commercial mixed feeds represent a substantial part of the new market for cottonseed meal. Under present manufacturing practices, we are presenting to the trade a 41 percent protein product containing more hulls than are desirable in poultry feeds. Looking to the future, attention should be given to the possibility of producing a limited tonnage of special processed cottonseed meal with a protein content comparable to that of soybean oil meal. To do this would place cottonseed meal on a better competitive basis.

Nothing has been said here concerning one of the problems of long standing with respect to the utilization of cottonseed meal. It has been known for years that cottonseed meal causes the discoloration of eggs kept in cold storage. To date considerable information has accumulated concerning the mechanism of this discoloration and its relationship to gossypol and other compounds. As yet a practical solution of the problem has not been found, probably for the reason that extremely small amounts of gossypol will cause the discoloration of eggs. Levels of gossypol which are quite safe for swine and growing poultry will still cause egg discoloration. It is to be hoped that some of the newer manufacturing procedures now being investigated will solve this problem.

There is reason for confidence that the cottonseed crushing industry will keep and expand the newly found markets for cottonseed meal. In the end, the continued production of truly superior quality products will be the deciding factor.

■ **JOHN H. DAVIS**, former Assistant Secretary of Agriculture, is the U.S. nominee for director general of the Food and Agriculture Organization, to succeed DR. P. V. CARDON, who resigned last March. The office will be filled at a Rome meeting in September.

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REFEREE SERVICE

Vegetable Oils—Linters—Cake

Feeds, Ingredients, Alfalfa, Gossypol, Nitrogen solubility, Stilbestrol, Lipamone, Nicarbazine, Urea, Vitamin A.

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Seed-O-Meter for Gins

A new device for continuous automatic weighing of cottonseed. Cost and installation is much less than the cost of installation alone on the old hopper-type scale.

- Records every five seconds • Records by the second, the bale, the season—or all three • Takes the guesswork out of splitting bales • No stops, no delays, no labor • No seeds get by without being weighed and recorded • Economical, Dependable and Accurate.

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Contact us for Cotton Beam Scales, Grab Hooks, Sampling Knives, and Cotton Scale Repairs.

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**The
GINNER'S PAGE**

office and yard supplies

METAL BALE TAGS



STYLE B This is the Lowndes "Standard" metal tag, shown in exact size. Available in Red, Blue, Green, Gold. This tag wraps around the bale tie.



STYLE A This is the Ennis "Duo" debossed metal tag in exact size. Available in Red, Blue, Green, Gold, Black.



STYLE C This is the Ennis "Stamped" metal tag in exact size. Available in Red, Blue, Green, Gold, Black.

QUANTITY		STYLE A	STYLE B	STYLE C	STYLE D	STYLE E
500		\$13.90	\$12.50	\$13.16	\$11.50	\$13.90
1000		22.68	22.75	21.95	20.50	22.68
2000	Per M	21.58	22.25	20.90	19.75	21.58
3000	"	21.21	22.00	20.49	19.50	21.21
5000	"	20.49	20.50	19.75	18.50	20.49
10000	"	19.38	20.25	18.65	17.50	19.38
20000	"	18.65	20.00	17.91	17.00	18.65
50000	"	18.29	20.00	17.56	17.00	18.29
Over 50M	"	17.55	20.00	16.83	17.00	17.55



STYLE D This is the Lowndes "Slotted" metal tag, shown in exact size. Available in Red, Blue, Green, Gold.



STYLE E This is the "Denman" metal tag, shown in actual size. Available in Red, Blue, Green, Black or Plain Galvanized Steel.

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Presenting

Chester L. Phillips

Greenville, Texas



CHESTER L. PHILLIPS, Greenville, Texas, has been a ginner for more than 20 years but he's been a member of the cotton industry for 60 years, because he was born on a cotton farm in Collin County, which adjoins the county in which Chester now lives.

When he was six years old, in 1899, Chester went to Hunt County with his family, and he's been there since. He went through high school and then attended Burleson College in Greenville. He married Lucia Taggart, a Hunt County girl, in 1913. They had three sons, one of them lost in the service in World War II. The other two brothers, Howard and Harold, live in Stafford, Ariz., where Chester and Mrs. Phillips recently visited them, their wives and four girls.

In 1934, Texas Refinery at Greenville persuaded Chester to manage its gin and he later was placed in charge of all of the firm's gins. In 1941 he became manager of Greenville Cooperative Gin, the position he now holds.

A good citizen, Chester Phillips has served on his local draft board since World War II. It's not an easy task, nor one to win friends, but he makes a point of discussing the matter with the boys and their parents and seeing that everyone is treated fairly, and understands it. The ginner also is a steward in the Methodist Church, a Rotarian and Mason and has been a director of Texas Cotton Ginners' Association for the past eight years.

High Plains Production Of Cotton Discussed

"Cotton Production on the Texas High Plains" is the title of Bulletin 830 of the Texas Experiment Station. Written by staff members at the Lubbock Experiment Substation and Texas A. & M. College, the publication contains practical and authoritative information by men whose research has contributed much to High Plains production practices.

Subjects discussed range from the proper preparation of the seedbed through the harvesting and field storage of cotton.

Operators' Schools

(Continued from Page 7)

of other machines and accessories that can be used to improve the grade of cotton. The groups rotated about every two hours so that by the end of the school all operators had made a complete study of the gin.

After a study period by each group on all the different gin parts on the second day, all operators met together with instructors to relate all the machines into one ginning process and to ask questions. The operators did ask questions that helped them with their problems at home.

In 1953, 89 Tennessee gin operators were present for these schools. In 1954, 145 operators from Tennessee registered with the four companies cooperating and in 1955, 96 gin operators attended, this made a total of 330 gin operators from most of our 352 gins in our 42 Tennessee cotton counties in three years. (Total attendance from all states was 500 to 1,000 each year.)

The method of instruction, of course, had a lot to do with the success of these schools, but the cooperation of the gin manufacturers' representatives did a lot to make the gin operators feel welcome to their plant which provided a friendly atmosphere while refreshments and a light lunch were served.

Other details that make a successful school are the planning and nature of the publicity. We put out an announcement early and, as the date of the school approached, gave more details in daily and county papers. This pub-

licity is most effective in the daily and weekly papers, when followed by Extension engineers and the gin manufacturers inviting operators to the school.

By April, 1955, the gin schools had present representatives from most of our gins. Mississippi and Louisiana were now cooperating also in the school.

The current models of machinery have been very well explained and most of the improved ginning practice is in the minds of our operators.

This being the situation this year, we plan to skip 1956 on our schools in the gin distributors' plants and have a short version of the school, using a gin out in the state at some central location where we can have a good attendance of the few who have not gone to the Memphis schools.

There is always a turnover in operators, and new gin models. Research makes available improved practice. These, with the continuing pressure to improve cotton quality, will make the gin operators schools a permanent part of our program. Perhaps after this year we can return for one or more years to the schools in the gin manufacturers' plants in Memphis.

Mulching Tool Developed

J. A. Smith, Stovall, and C. B. Jones, Gerard, Miss., have developed a mulching tool for shallow cultivation of crops. The objective is to control small grass and conserve moisture in cotton, soybeans and other crops.

Mounted on a tractor, the tool has blades on the bottom two inches deep.

Regulator Triples Height of Plants

HEIGHTS of some plants have been tripled by the use of a new growth regulator in experiments by USDA at Beltsville, Md. Gibberellic acid is the name of the regulator, used in greenhouse tests.

Gibberellic acid was applied in a lanolin paste mixture externally to the stems of young plants. Within three to four weeks following treatment, ornamentals, such as geranium, poinsettia, sunflower, rose, salvia, dwarf dahlia, petunia, and aster, had grown one-half to three times taller than comparable untreated plants. In limited tests with several vegetables, including tomatoes, snapbeans, and peppers, applying the chemical directly to the fruit did not affect fruit growth. USDA scientists point out that research on gibberellic acid is still in a preliminary stage.

Tobias Becomes Partner In Kauders-Steuber

E. Ralph Kauders and Max N. Tobias became partners on July 1 in the Kauders-Steuber Co., which has headquarters in Chicago and will continue to operate under the name by which it has done business in the linters trade for many years.

Tobias is not expected to become active in the linters business, but will continue to devote his usual time to Max N. Tobias Bag Co., Inc., New Orleans.

What is your power problem?

Why experiment with unfamiliar power problems—when you can take full advantage of the experience and know-how of the Nation's Largest Distributor of Diesel Engines?

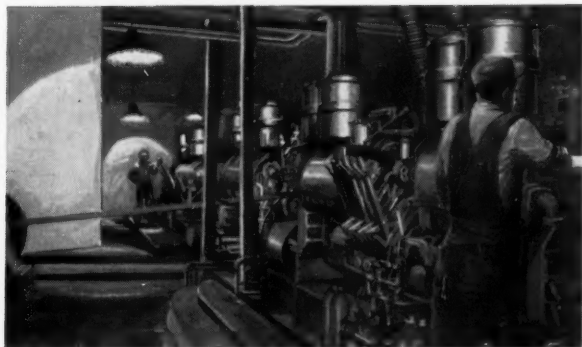
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... the advantages of moisture in baling cotton. It makes pressing simpler. It enables the press crew to keep up with the production of the largest gin. It reduces sponginess so that losses from broken ties are practically eliminated. Press repairs are kept at a minimum. It turns dry, harsh-feeling samples into smooth ones that have a slightly longer staple.

"Magic Wand" Moisture Control

The gentle mist of "wet water" now has the most dependable control yet devised. Two steel rods (Magic Wands) protruding up through the bottom of the lint slide are connected to two sensitive-but-rugged micro switches under the slide. When the batt of cotton depresses the "wands" the mist starts. The Moist wetting agent insures quick, uniform penetration ... costs less than 2¢ a bale and wet water only adds about 8 lbs. to a 500 lb. bale. Breaks in the batt, releasing either "Magic Wand" or both, instantly stop the mist and prevent wetting the lint slide.

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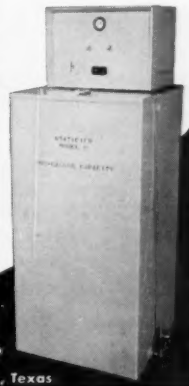
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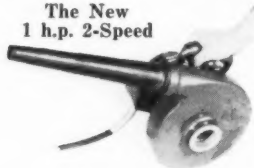
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Write today for our
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CALENDAR							
Conventions		Meetings		Events			
12	13	14	15	16	17	18	

• Aug. 13-15—Joint conventions, American Soybean Association and National Soybean Processors' Association, University of Illinois, Urbana, Ill. R. G. Houghtlin, president, National Soybean Processors' Association, 3818 Board of Trade Building, Chicago 4; Geo. M. Strayer, executive vice-president, American Soybean Association, Hudson, Iowa.

• Aug. 22-23-24—Tenth Beltwide Cotton Mechanization Conference, Biltmore Hotel, Atlanta, Ga. For information, write National Cotton Council, P. O. Box 9905, Memphis 12, Tenn.

• Sept. 23-26 — American Oil Chemists' Society fall meeting, Sherman Hotel, Chicago. For information, write Society headquarters, 35 East Wacker Drive, Chicago.

• Dec. 13-14 — Second annual Cotton Production Conference, Tutwiler Hotel, Birmingham, Ala. For information, write National Cotton Council, P. O. Box 9905, Memphis, Tenn.

1957

• Jan. 28-29 — National Cotton Council of America annual meeting, Jefferson Hotel, St. Louis. For information, write Wm. Rhea Blake, executive vice-president, P. O. Box 9905, Memphis, Tenn.

• Jan. 31-Feb. 1—Carolinas Ginners' Association annual convention, Clemson College, Clemson, S.C. Clyde R. Allen, executive secretary, P. O. Box 512, Bennettsville, S.C.

• Feb. 4-5—Texas Cooperative Ginners' Association, Houston Bank for Cooperatives and Texas Federation of Cooperatives joint meeting, Rice Hotel, Houston. For information, write B. E. Schroeder, 307 Nash Building, Austin.

• Feb. 4-5—Cottonseed Processing Research Clinic, Southern Regional Research Laboratory, New Orleans. Sponsored by Valley Oilseed Processors' Association and USDA. C. E. Garner, 1024 Exchange Building, Memphis, Association secretary.

• Feb. 12-13 — Southeastern Gin Suppliers' Exhibit, Biltmore Hotel, Atlanta. Sponsored by Southeastern Ginners' Council, composed of ginners of Alabama, Georgia and Florida. For information and space, write Tom Murray, 714 Henry Grady Building, Atlanta 3.

• Feb. 28-Mar. 1 — Oklahoma Cotton Ginners' Association annual convention, Skirvin Hotel, Oklahoma City. Edgar L. McVicker, 1004 Cravens Building, Oklahoma City, secretary-treasurer.

• March 5-6—Western Cotton Production Conference, Hotel Westward Ho, Phoenix, Ariz. Sponsored by Southwest Five-State Cotton Growers' Association and National Cotton Council.

• March 11-13 — Midsouth Gin Supply Exhibit, Midsouth Fairgrounds, Memphis. For information, write W. Kemper Bruton, P. O. Box 345, Blytheville, Ark. Arkansas-Missouri, Louisiana-Mississippi and Tennessee ginners' associations sponsor the exhibit and will hold their annual convention concurrently.

• March 11-13—Arkansas-Missouri Cotton Ginners' Association annual conven-

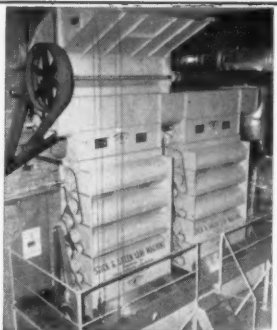
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Does your gin need to remove more sticks, green leaf, grass, motes and pin trash to make your sample better? Then you need these machines.

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tion. Memphis. W. Kemper Bruton, P. O. Box 345, Blytheville, Ark., executive vice-president. Concurrent with Midsouth Gin Supply Exhibit.

• March 11-13 — Louisiana-Mississippi Cotton Ginners' Association annual convention. Memphis. Gordon W. Marks, P. O. Box 1757, Jackson, Miss., secretary. Concurrent with Midsouth Gin Supply Exhibit.

• March 11-13 — Tennessee Cotton Ginners' Association annual convention. Memphis. W. T. Pigott, Milan, Tenn., secretary-treasurer. Concurrent with Midsouth Gin Supply Exhibit.

• March 25-26 — Valley Oilseed Processors' Association annual meeting. Buena Vista Hotel, Biloxi, Miss. C. E. Garner, 1024 Exchange Building, Memphis, secretary.

• Apr. 30-May 1-2 — Spring meeting of American Oil Chemists' Society. Roosevelt Hotel, New Orleans. For information, write American Oil Chemists' Society, 35 East Wacker Drive, Chicago.

• April 1-3 — Texas Cotton Ginners' Association Convention, State Fair of Texas grounds, Dallas. Ed H. Bush, executive vice-president, 3724 Race Street, Dallas. For information regarding exhibit space, write R. Haughton, president, Gin Machinery & Supply Association, P. O. Box 7985, Dallas 26.

• May 2-3 — National Cotton Compress and Cotton Warehouse Association annual convention. Roosevelt Hotel, New Orleans. John H. Todd, 1085 Shrine Building, Memphis, executive vice-president.

• May 8-10 — Oil Mill Operators' Short Course. Texas A. & M. College, College Station. Sponsored by Texas Cottonseed Crushers' Association and International Oil Mill Superintendents' Association. For information, write Dr. J. D. Lindsay, Texas A. & M. College.

• May 14-15 — Oklahoma Cottonseed Crushers' Association annual convention.

Western Hills Lodge, Sequoyah State Park, Wagoner, Okla. Edgar L. McVicker, 1004 Cravens Building, Oklahoma City, secretary-treasurer.

• May 20-21 — National Cottonseed Products Association annual convention. Shoreham Hotel, Washington, D.C. John F. Moloney, 19 South Cleveland Street, Memphis, secretary-treasurer.

• June 5-7 — Tristates Oil Mill Superintendents' Association annual convention. Memphis, Tenn.

• June 16-18 — Joint annual convention of South Carolina Cotton Seed Crushers' Association and North Carolina Cottonseed Crushers' Association. Fort Sumter Hotel, Charleston. Mrs. M. U. Hogue, 612 Lawyers Building, Raleigh, secretary-treasurer, North Carolina Association; Mrs. Durrett L. Williams, 609 Palmetto Building, Columbia, secretary-treasurer, South Carolina Association.

• June 19-20-21 — Southwestern Peanut Shellers' Association annual convention. Menger Hotel, San Antonio, Texas. For information, write John Haskins, Durant Peanut Co., Durant, Okla., secretary-treasurer.

• Sept. 30-Oct. 1-2 — Fall meeting of American Oil Chemists' Society. Cincinnati. For information, write American Oil Chemists' Society, 35 East Wacker Drive, Chicago.

California Screw Conveyor Plant Starts Production

Production began July 1 at the new Santa Clara, Calif., plant of Screw Conveyor Pacific Corp. Initial products manufactured are Screw Conveyor Systems, Bucket Elevator units and components used in the assembly of Kewanee Truck Dumpers and Truck Lifts.

Management of the plant has been placed in the hands of W. E. (Earl) Forster, who formerly was sales manager of the operation, dating back to Jan. 1, 1955. Forster has also been elected vice-president and director of Screw Conveyor Pacific Corp.

The plant site, consisting of five acres on Richard Street in Santa Clara, was purchased several years ago as part of the expansion plans of the parent firm, Screw Conveyor Corp., of Hammond, Ind. Forster will be assisted by Martin M. McGuire.

Both Forster and McGuire have many years of experience in the manufacture and sale of Screw Conveyor and Bucket Elevating Equipment. The Santa Clara plant will enable them to render better service to the many customers of Screw Conveyor on the Pacific Coast.

The engineering department at the Hammond works will be available to them for the development of elevating and conveying systems for any contemplated mill or elevators or revisions in old plants.

Hammond products such as, Kewanee hydraulic Truck Dumpers, Screw-Lifts, Screw-Veyors, Screw-Flos, Nu-Hy Grain Elevator Buckets, as well as, the newly developed "Winona" Elevator Bucket, will be more efficiently handled. The new plant at 1100 Richard Street is strategically located for prompt shipments in the San Francisco-Oakland Bay area and also, to any point along the entire Pacific Coast, the firm points out.

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Stormproof

COTTON SEED



It's Sturdy!

After more than five years research, Watson has perfected a STORMPROOF cotton strain. Easily adapted to mechanical harvesting or hand snapping. Watson's STORMPROOF is quality bred cotton and will not waste away in the field.

- MATURES EARLY
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AS POPULAR AS EVER

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STOP HEAT LOSSES!

PTC CABLE — DETECTS HEAT INSTANTLY in stored cotton seed with guarantee performance because it's built rugged. (1) Improved Flaw Steel with tensile strength of 7,040 lbs. (2) Plastic sheath insulates against friction, moisture, fumigants, etc. (3) Heat-sensitive thermocouple circuit triple coated with Formvar insulation.

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& SUPPLY CO., INC.**

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laugh it off

When Eddie, the slow moving and inefficient clerk in a small town store, was not in evidence one morning, a customer asked, "Where is Eddie? He ain't sick, is he?"

"Nope, he ain't," replied the proprietor. "He just ain't workin' here no more."

"That so?" responded the villager. "Got anybody in mind for the vacancy?"

"Nope. Eddie didn't leave no vacancy."

At great risk the valiant knight had rescued the fair maiden and, now, he was holding her in his arms.

"Listen, big boy! You're not holding me for ransom, are you?"

"Not me! Let Ransom get his own women."

"I'm a bit worried about my wife," he told his friend. "She was talking in her sleep and saying, 'No, Frank; no, Frank!'"

"Well, what are you worried about?" demanded the friend. "She said 'No,' didn't she?"

During a recent windstorm in Texas, Walter Rogers, a Democratic Representative from that state, estimated that dust was blowing 30,000 feet in the air. "Texas," he concluded, "is now not only the biggest state sideways, but also up and down."

A proud parent called up the newspaper and reported the birth of twins. The girl at the news desk didn't quite catch the message over the phone.

"Will you repeat that?" she asked.

"Not if I can help it," was the reply.

"Waiter," said a diner who had just sampled his dinner, "these veal chops don't seem very tender to me."

"Sir," replied the waiter, "I used to be a butcher, and I can tell you that less than a month ago those chops were chasing after a cow."

"That may be," replied the man, "but not after milk."

Cowboy: Give me the once-over, Doc. Doctor (after a thorough examination): Well, son, you have a little lung trouble.

Cowboy: Waddya suggest?

Doctor: Can you arrange to sleep out-of-doors?

Cowboy: Well, I been sleeping under the old chuck wagon all summer, but I reckon I could kick a couple spokes outa the wheels.

Mrs. Mottie Myrons was granted a divorce when she told the judge that since their marriage her husband had spoken to her but three times. She was awarded the custody of their three children.

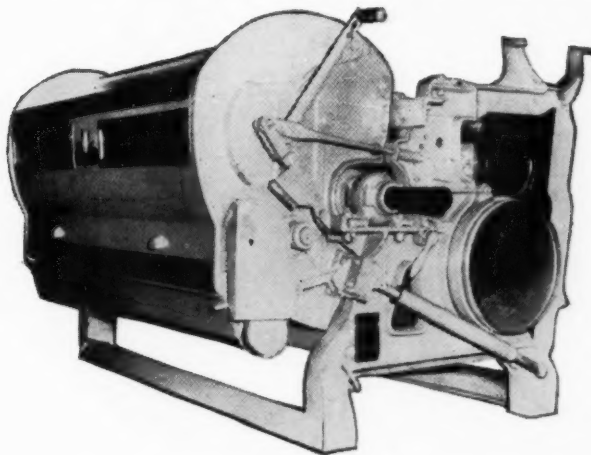
A man on vacation was paying his bill at a fashionable hotel. Looking at the cashier as she took his money, he asked her what she had around her neck. "A necklace, of course. Why do you ask?"

"Well," said the vacationer, "everything else around here is so high I thought it might be a garter."

An egotist is a guy who thinks if he had not been born the world would wonder why.

GULLETT

AIR BLAST COTTON GIN WITH LINT CLEANER BUILT IN



Clean Lint as You Gin
with Gullett Lint Cleaning Gin



GULLETT LINT CLEANING GINS clean lint while you GIN, because the stream of lint at the point this Cleaning System is applied is very thin, and lint tends to extend away from the gin saws. The fringe of this lint strikes GRID BARS and loosens pin trash, leaves and motes which are readily sucked up by air, drawn in over GRID BAR by suction fan, thus removing leaves and trash, also keeping the GRID BAR clean. This Suction Nozzle is very similar to the Air Blast Nozzle that removes ginned lint from the saws and has ample capacity for removing trash, leaves and motes, making a very effective Lint Cleaner within the gin.

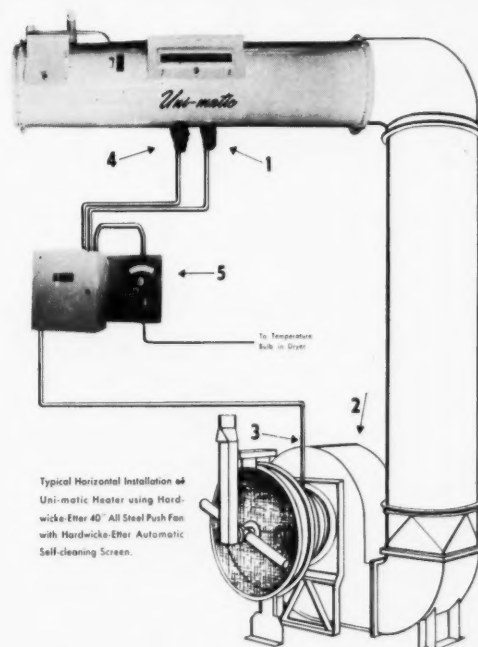
GULLETT GIN COMPANY

AMITE, LOUISIANA, U. S. A.

MANUFACTURERS OF COMPLETE LINE OF COTTON GINNING MACHINERY

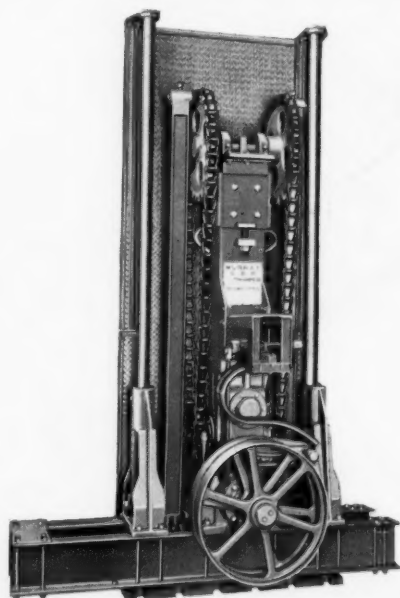
The UNI-MATIC Three Million B.T.U. Heater

- 1** PROTECTO-GLO safety relay stops gas flow when flame is out for safety combined with economy.
- 2** FAN PROTECTION. Since no heat is blown through the fan, hot air damage to blades or bearings is eliminated.
- 3** MERCURY-TUBE air flow safety switch. Gas will not flow until fan is operating properly.
- 4** SPARK ELECTRODE IGNITION. No pilot light needed. Gas is ignited by electric spark for added safety and economy.
- 5** CONTROL PANEL DIAL has two pointers on temperature scale. One pointer indicates temperature inside dryer. The other is set by the ginner to the desired temperature. Heat automatically maintained at any setting selected. Panel may be mounted at most convenient location for the ginner, giving remote-controlled heat at the finger-tips.



Typical Horizontal Installation of Uni-matic Heater using Hardwicke-Etter 40" All Steel Push Fan with Hardwicke-Etter Automatic Self-cleaning Screen.

HARDWICKE-ETTER COMPANY
Manufacturers of Complete Cotton Ginning Systems SHERMAN, TEXAS



D.D.D. TRAMPER

Precision ☆ Strength ☆ Superiority

This new improved Heavy Duty Tramper is extra heavy steel and alloy iron construction, precision machined at all wear surfaces, making the strongest, heaviest and most precision-built Tramper developed for the Ginning Industry, weighing approximately 7800 lbs.

Gear Set has continuous Load Rating of 35 horsepower and intermittent Load Rating of 70 horsepower. More than Three times the strength necessary for Load requirements.

An extra duty Tramper for users who want the best.

For further information, write for Bulletin No. 68.

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